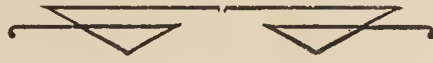


COUNTY BOROUGH OF WIGAN



The
Annual Report
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1917,

TOGETHER WITH

The Report of the Tuberculosis Officer,
The Report of the Chief Sanitary Inspector.



WIGAN :
Strowger & Son, Ltd., Printers, Clarence Press, Wallgate.
1918.



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b30276330>

THIS Report has been prepared in accordance with the instructions of the Local Government Board, as contained in the Sanitary Officers' (outside London) Order, 1910.

LIST OF CONTENTS.

	<i>Page</i>		<i>Page</i>
Acute Poliomyelitis	27	Midwives' Act, 1902.....	37
Analysis of Notifications	22	Offensive Trades	58
Births and Mortality Rates	89	Public Analyst's Report	59
Black Smoke Nuisance	55	Puerperal Fever	28
Closing Order, 1904—Shop Hours' Act	53	Rainfall	58
Committees	4	Removal of Nightsoil.....	57
Conversion of Closets	57	Report of Tuberculosis Officer...	42
Dairies, Cowsheds & Milkshops Order, 1885 and 1886.....	54	Scarlet Fever	23
Death-rate for Wigan—Last Ten Years	13	Shop Hours' Act, 1892-1905 and 1912	53
Death-rates, 1917.....	9	Small-pox	22
Deaths in Wards, 1917	14	Staff	5
Diarrhœa	27	Statistics	8
Diphtheria	27	Table 1—Weekly Return of Births and Deaths	10
Enteric Fever	25	Table 2—Monthly Table of Deaths from all causes and Zymotic Diseases, with rates per 1,000 per annum.....	11
Erysipelas	27	Table 3—Comparative Statistics between Wigan and other Towns	12
Factory & Workshop Act, 1901	51	Tuberculosis.....	39
Housing & Town Planning.....	55	Unpaved Yards and Passages...	56
Hospital	32	Vaccination Returns, 1915-1916	22
Introduction	6	Venereal Diseases	28
List of Deaths occurring among Soldiers	20	Whooping Cough	25
Local Government Board Returns : Tables 1, 2, 3, 4.....	15	Wigan Census, 1911	14
Maternity & Child Welfare.....	36	Zymotic Diseases	20
Measles	25		
Meat Inspection & Slaughter-houses	54		
Chief Sanitary Inspector's Report	61		

HEALTH COMMITTEE.

(From November, 1917, to November, 1918.)

Chairman - - - Alderman M. BENSON, M.D., J.P.
Vice-Chairman - - - - - THE MAYOR.
 The EX-MAYOR.

Alderman	J. O'DONAHUE, J.P.	Councillor	JAS. JOLLEY.
Councillor	H. BARTON.	"	A. E. MATHER.
"	WM. BANKHEAD.	"	P. MURPHY.
"	GEO. BURBRIDGE.	"	F. REES, M.D.
"	J. COUNSELL.	"	WM. B. SWALWELL.
"	J. HENDERSON.	"	E. YATES.

Committee meets on Third Thursday in each month, at 3-45 p.m.

SANITARY WORKS COMMITTEE.

Chairman - - - - - Alderman W. H. ANGUS.
Vice-Chairman - - - - - Councillor THOS. TAYLOR.
 The MAYOR. The EX-MAYOR.

Councillor	T. J. ARKWRIGHT.	Councillor	J. MITCHINSON.
"	GEO. BURBRIDGE.	"	ALFRED RATHBONE.
"	A. GUEST.	"	F. REES, M.D.
"	C. W. HEALY.	"	J. ROSCOE.
"	W. HIGHTON.	"	J. WALKDEN.
"	JOHN R. KING.		

Committee meets on Third Monday in each month, at 4-30 p.m.

HOSPITALS SUB-COMMITTEE.

Chairman - - - - - Councillor H. BARTON.
 The MAYOR. The EX-MAYOR.
 Alderman M. BENSON, M.D., J.P. Councillor P. MURPHY.
 " J. O'DONAHUE, J.P. " W. B. SWALWELL.
 Councillor A. E. MATHER. " E. YATES.

Committee meets the Tuesday before the Third Thursday in each month at the Hospital.

HOUSING & INSANITARY HOUSES COMMITTEE.

Chairman - - - - - Councillor E. YATES.
Vice-Chairman - - - - - Councillor J. LOWE.
 The MAYOR. The EX-MAYOR.

Alderman	T. ASHTON, J.P.	Councillor	W. HIGHTON.
"	J. GASKELL.	"	JNO. R. HOLLAND.
"	A. S. HILTON, J.P.	"	J. JOLLEY.
Councillor	W. CATTERALL.	"	J. MCCURDY.
"	R. GORE.	"	A. RATHBONE.
"	J. GORMAN.	"	F. REES, M.D.
		Councillor	J. WALKDEN.

Committee meets on the Second Monday in each month, at 3-30 p.m.

Medical Officer of Health's Department, 1917.

Medical Officer of Health,
Medical Superintendent of Sanatoria,
Superintendent School Medical Officer,
Administrative Tuberculosis Officer :

* FRED E. WYNNE, B.A., M.B., Ch.B., D.P.H., &c.

Tuberculosis Officer,
Acting Medical Officer of Health,
Acting Medical Superintendent of Hospitals ;
Acting Superintendent School Medical Officer :

GEORGE JESSEL, M.A., M.D., D.P.H.

Acting School Medical Officer :

J. FOREMAN BERRY, M.B., Ch.B., L.R.C.P.E., &c.

Chief Sanitary Inspector, &c. :

CHARLES H. FRANCE (a) (b) (g) (h).

Sanitary Inspectors :

FRED MARTLEW (b) (c) (h), FRED G. BISHOP, JOHN ASHTON (b).

Assistants :

* ERNEST RICHARDSON, JAMES RISLEY, † ARTHUR MACKENZIE.

Lady Health Visitors :

A. MORT (d) (e), B. CROMPTON (d) (e) (g) (i),
S. C. WILSON (d) (f), E. TOOTELL (b) (d) (h).

Tuberculosis Nurse :

E. WALTERS.

Clerks :

* ARTHUR BYERS, * THOMAS BROWN, † ANNIE B. BOTTOMLEY,
† VERA WALSH.

Disinfectors :

GEORGE CROSTON HENRY PARKINSON, JOHN ARROWSMITH.

* On Military Service.

† Temporary Assistants.

(a) Sanitary Inspector's Certificate (Lond.), Royal Sanitary Institute.

(b) Sanitary Inspector's Certificate (Prov.), Royal Sanitary Institute.

(c) Meat Inspector's Certificate, Liverpool University.

(d) Certificate, Central Midwives' Board.

(e) Health Visitor and School Nurse's Certificate, Royal Sanitary Institute.

(f) Sanitary Inspector's Certificate, London Examination Board.

(g) Associate Royal Sanitary Institute.

(h) Member Sanitary Inspectors' Association.

(i) Associate Sanitary Inspectors' Association.

HEALTH OFFICE, WIGAN,

August, 1918.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I have the honour to present herewith my ANNUAL REPORT on the health of the Borough during the year 1917.

Some delay in the compilation and final correction of the Statistics has been inevitable owing to shortage of Staff in the Department.

As I only resumed civilian duties in November, I am able to do little more than place the usual statistical information before you.

The figures show that the birth-rate has been fairly well maintained, and is still well in excess of that of England and Wales as a whole.

The recorded death-rate shows an increase of $\cdot 76$ per 1,000, and the corrected death-rate an increase of $\cdot 84$ per 1,000 over the figures of the previous year.

This compares with an increase of $\cdot 4$ in England and Wales and $\cdot 2$ in the 96 great towns.

This increase is no doubt due to factors directly and indirectly connected with the war, and its continuance and probable increase must be anticipated as long as the war lasts, and in fact until house conditions become normal and the work of reconstruction can proceed.

The impossibility of obtaining labour and materials has practically brought the work of improving insanitary dwellings to a standstill, and closing orders even when nominally in force become inoperative owing to the impossibility of re-housing displaced families.

Overcrowding appears to be worse than ever, owing in many cases to the wives and families of soldiers coming to live with relatives, and to a certain extent, to the existence of imported labour.

As building is at a standstill overcrowding thus becomes inevitable.

Any material improvement in the public health of the Borough is impossible as long as we have our deplorable list of insanitary and overcrowded houses, unpaved yards, and privy middens.

Fortunately, the Housing Committee is fully alive to these facts, and a great deal of work has been done which has resulted in their plans for the future being in a very forward condition.

There is, therefore, every reason to believe that the period of reconstruction after the war will see some really revolutionary changes in the conditions under which our wage-earning classes live, and the disappearance of some of the worst of our heritage from the past, with a corresponding reduction of the sickness and death-rates.

In the meantime, as will be seen from your Chief Sanitary Inspector's Report, your Sanitary Staff has devoted its energies to the abatement of nuisances, the maintenance as far as possible under the circumstances of a reasonable standard of sanitation in the town, the protection of the food supply and destruction of unsound food, and the other statutory duties which devolve upon them.

The effect on infant health and mortality of our unsatisfactory housing and sanitary conditions is to a certain extent mitigated by the excellent and unremitting work of your Health Visitors, in the clinics and in the homes of the people, but this work should never be regarded as anything but a palliative. While its educative value is very great it cannot place the children in those surroundings of cleanliness, health and decency which ought to be the birth-right of every citizen.

I am,

Yours faithfully,

FRED E. WYNNE,

Medical Officer of Health.

VITAL STATISTICS.

STATISTICAL SUMMARY FOR 1917 & 1916.

	1917.	1916.
Civil Population estimated July 1st	83,110	83,203
<i>Births</i> —Males 1060 Total ...	2,024	2,108
Females 964		
Annual rate of births per 1,000 of population	24·15	24·30
Ditto on Registrar General's estimated		
population for 1916-17	21·84	23·28
Ditto for England and Wales	17·8	21·60
Illegitimate births 92, or ·99 per 1,000 of		
population, a percentage of	4·54	3·98
<i>Deaths</i> —Males 713 Total ...	1,345	1,284
Females 632		
Recorded death-rate	16·18	15·42
Corrected death-rate	18·01	17·17
Ditto in England and Wales	14·4	14·00
Death-rate in 96 great towns	14·6	14·40
Excess of registered births over deaths ...	679	824
Total deaths from seven principal Zymotic		
Diseases	153	87
Annual rate of mortality from seven principal		
Zymotic Diseases	1·84	1·04
Total deaths from Diarrhœa	29	40
Infantile-rate (deaths per 1,000 births) ...	118	113
Ditto for England and Wales	97	91
Ditto for 96 great towns	104	99
Deaths of infants under 1 day old, number...	27	34
,, ,, ,, 1 year (legitimate)...	228	207
,, ,, ,, 1 year (illegitimate)	12	33

Acreage.—With an acreage of 5,082, and a civil population estimated at 83,110, we have 16·35 persons per acre.

Population.—This figure has been supplied by the Registrar-General. The Registrar-General's estimate for the population of the Borough on July 1st, 1914, *i.e.*, a month before the outbreak of war, was 90,842. There is thus a reduction of over 7,732 during the three years due to the departure of men joining His Majesty's forces. The loss of thousands of the strongest and healthiest members of the community, whose expectation of life would be long, has naturally an adverse effect upon the death-rate.

Births.—The number of births registered during 1917 is 2,024 (males 1,060, females 964), the rate per 1,000 of the population being 24·15. The birth-rate, compared with 1916, is 1·44 lower. The birth-rate, estimated on Registrar-General's population for Wigan, July 1st, 1917, is 21·84. The illegitimate births number 92, or ·99 per cent.

The Mortality-rate.—The deaths for 1917 number 1,345 (males 713, females 632), being an excess of 81 males over females. The recorded rate per 1,000 of the population per annum is 16·18; in 1916, 15·42; thus on a population of 83,110 we have a decrease in deaths of 61 as compared with 1916. There is, therefore, an increase in the death-rate of ·76 per 1,000.

The death-rate for each quarter is as follows:—

1917.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
All Causes	22·45	13·74	11·41	13·56
Zymotics	3·06	·90	1·71	1·61

The Zymotic-rate, 1·84, shows an increase of ·80 for 1917, in the previous year it was 1·04.

DEATH-RATES, 1917.

Disease.	No. of Deaths	Rate
Enteric Fever	...	...
Small-pox	...	...
Measles	77	·92
Scarlet Fever	5	·06
Whooping Cough	36	·43
Diphtheria and Croup	6	·07
Influenza	8	·09
Erysipelas	3	·03
Phthisis (Pulmonary Tuberculosis)	122	1·46
Tuberculosis Meningitis.....	18	·21
Other Tubercular Diseases	17	·20
Cancer, Malignant Disease	55	·66
Rheumatic Fever	8	·09
Meningitis	10	·12
Organic Heart Disease	73	·87
Bronchitis	133	1·59
Pneumonia (all forms).....	175	2·10
Other Diseases of Respiratory Organs	4	·04
Diarrhœa and Enteritis (under 2 years)	41	·49
Appendicitis and Typhlitis	4	·04
Cirrhosis of Liver	9	·10
Alcoholism	...	...
Nephritis and Bright's Disease	31	·37
Puerperal Fever	2	·02
Other Accidents and Diseases of Pregnancy and Parturition	14	·16
Congenital Debility and Malformation (including Premature Birth)	91	1·09
Violent Deaths (excluding Suicides)	53	·63
Suicide	5	·06
Other Defined Diseases	292	3·51
Diseases ill-defined or unknown	53	·63
Total.....	1,345	16·18

TABLE I.

WEEKLY RETURNS OF BIRTHS AND DEATHS FOR 1917.

1917. WEEK ENDING.	Deaths from all Causes	Annual Rate per 1000	Deaths from Zymotics	Zymotic- Rate	Births	Annual Rate per 1000
January 6.....	32	19.96	1	.62	39	24.32
„ 13.....	18	11.22	1	.62	42	26.20
„ 20.....	29	18.09	2	1.24	38	23.70
„ 27.....	34	21.21	3	1.87	37	23.08
February 3.....	33	20.58	...	...	28	17.46
„ 10.....	52	32.43	8	4.99	36	22.45
„ 17.....	59	36.80	12	7.49	46	28.69
„ 24.....	56	34.95	12	7.49	38	23.65
March 3.....	46	28.71	5	3.12	36	22.47
„ 10.....	27	16.85	7	4.36	37	23.09
„ 17.....	28	17.47	4	2.49	34	21.22
„ 24.....	25	15.59	8	4.99	42	26.20
„ 31.....	29	18.09	1	.62	37	23.08
April 7.....	13	8.10	3	1.87	30	18.71
„ 14.....	29	18.09	2	1.24	45	28.07
„ 21.....	23	14.33	2	1.24	42	26.18
„ 28.....	27	16.83	2	1.24	40	24.93
May 5.....	31	19.32	1	.62	40	24.93
„ 12.....	12	7.47	...	...	49	30.52
„ 19.....	27	16.81	1	.62	39	24.29
„ 26.....	19	11.83	...	...	47	29.26
June 2.....	25	15.56	2	1.24	33	20.54
„ 9.....	18	11.20	2	1.24	52	32.35
„ 16.....	26	16.17	3	1.86	43	26.75
„ 23.....	19	11.82	1	.62	49	30.49
„ 30.....	18	11.19	...	...	40	24.87
July 7.....	19	11.81	2	1.24	36	22.38
„ 14.....	18	11.18	1	.62	48	29.83
„ 21.....	22	13.67	2	1.24	44	27.34
„ 28.....	18	11.18	1	.62	33	20.50
August 4.....	20	12.42	4	2.48	38	23.60
„ 11.....	21	13.04	2	1.24	37	22.98
„ 18.....	19	11.80	5	3.10	30	18.63
„ 25.....	22	13.65	3	1.86	54	33.51
September 1.....	16	9.93	5	3.10	29	18.00
„ 8.....	19	11.78	3	1.86	41	25.43
„ 15.....	13	8.06	1	.62	34	21.09
„ 22.....	17	10.53	3	1.85	45	27.89
„ 29.....	15	9.29	4	2.47	37	22.93
October 6.....	12	7.43	3	1.85	47	29.12
„ 13.....	16	9.91	2	1.23	45	27.88
„ 20.....	19	11.76	2	1.23	48	29.72
„ 27.....	18	11.14	1	.61	34	21.05
November 3.....	12	7.43	...	...	35	21.67
„ 10.....	18	11.13	2	1.23	36	22.27
„ 17.....	21	12.99	1	.61	35	21.65
„ 24.....	32	19.80	1	.61	26	16.08
December 1.....	20	12.37	1	.61	30	18.56
„ 8.....	25	15.47	4	2.47	41	25.37
„ 15.....	24	14.84	3	1.85	35	21.64
„ 22.....	26	16.07	3	1.85	33	20.40
„ 29.....	42	25.99	11	6.80	20	12.37
Transferable	66	...	...	...	14	...

Registrar-General's Estimated Population, 1917 :—

For Deaths, 83,110.

For Births, 92,644

TABLE II.

MONTHLY LIST OF DEATHS FROM ALL CAUSES AND ZYMOTIC DISEASES WITH RATES PER 1,000
PER ANNUM FOR 1916 AND 1917.

Four Weeks Ending.	No. of Deaths from All Causes.		Annual Rate per 1,000 living.		No. of Deaths from Zymotic Diseases.		Annual Rate per 1,000 living.		Deaths of		
	1917	1916	1917	1916	1917	1916	1917	1916	Infants under 1 year.	1917	1916
January 27th	113	90	17.62	14.10	7	8	1.08	1.25	17	37	28
February 24th	200	105	31.19	15.94	32	10	4.99	1.56	35	59	25
March 24th	126	109	19.65	17.07	24	5	3.74	.77	16	39	31
April 21st	94	108	14.65	16.92	8	6	1.24	.93	16	33	35
May 19th	97	112	15.10	17.55	4	2	.62	.31	21	24	26
June 16th	88	95	13.69	14.89	7	3	4.34	.46	15	29	30
July 14th	74	91	11.50	14.26	4	6	2.48	.93	13	33	29
August 11th	81	53	12.57	8.30	9	5	1.39	.77	29	16	11
September 8th	76	77	11.79	12.21	16	9	2.48	1.40	27	14	18
October 6th	57	87	8.82	13.63	11	22	1.69	3.49	18	12	25
November 3rd	65	77	10.06	12.06	5	8	.76	1.24	15	17	24
December 1st.....	91	95	14.07	14.88	5	2	.76	.31	13	27	31
December 29th	117	105	18.09	16.45	21	1	3.24	.15	25	32	41
<i>Transferable</i> .	66	80	...	...	...	1	...	...	...	12	26
TOTALS	1345	1284	16.18	15.42	153	88	1.84	1.04	240	384	380

TABLE III.

COMPARATIVE STATISTICS OF WIGAN AND TWENTY-THREE OTHER TOWNS.

Town.	Population	Birth-rate	Death-rate	Zymotic-rate	Infantile death-rate per 1,000 births	Pneumonia death-rate	Other respiratory death-rate	Phthisis death-rate	Deaths from other forms of Tuberculosis	Figures as to Venereal Diseases
Accrington	40,694	12.89	13.88	.56	95.72	1.27	...	.98	.24	...
Barrow-in-Furness	83,179	24.30	11.40	.516	97.80	1.15	1.19	.82	.30	...
Birkenhead.....	144,993	22.40	13.30	.7	95	...	...	1.1	.40	...
Blackpool	62,227	10.64	13.95	.13	81.30	.8	2.5	1.03	.20	...
Bootle	76,772	24.40	17.61	1.69	99	2.22	4.63	1.82	26 deaths	9 deaths
Bolton	163,441	14.80	15.10	1.26	107	1.3	3.4	1.15	62 deaths	8 deaths
Bradford	296,892	13.06	15.34	.81	132	1.04	2.66	1.21	.35	...
Burnley.....	103,098	13.90	14.10	1.03	143	.71	2.30	1.00	.34	...
Burton-on-Trent	44,000	16.52	13.54	.39	89	...	...	1.11	.32	...
Carlisle	52,813.	18.80	14.50	1.2	106.50	.9	.8	1.30	.39	...
Crewe	45,825	16.60	12.00	.68	81	.13	1.9	.80	.46	...
Dewsbury	52,244	15.80	14.10	1.2	97	1.0	2.8	.90	.20	...
Halifax	92,775	12.80	16.10	.62	119	1.1	2.9	.90	.30	...
Huddersfield	107,969	15.29	13.29	.59	80	1.12	2.81	.92	.19	5 deaths
Kingston-on-Hull	246,357	18.90	16.10	1.3	120	1.5	3.2	1.50	.60	14 deaths under 1
Lancaster	44,500	16.14	12.87	.45	91	.85	2.40	1.05	9	[year
Rotherham	65,300	24.79	13.90	1.05	97	1.73	2.89	.91	.70	...
South Shields.....	106,500	22.80	18.60	1.86	138	1.82	3.8	2.09	.60	11 deaths from
Stalybridge.....	23,500	14.30	15.40	.68	128.5	.89	3.5	1.66	.60	[Syphilis
Stockport	115,599	15.05	12.76	.53	95.6	1.07	3.78	.97	.35	...
Stockton-on-Tees	57,048	20.04	19.01	2.4	130	1.8	3.6	1.40	.82	...
Stoke-on-Trent	215,116	20.80	16.50	1.34	116	1.67	4.04	1.53	.38	18 deaths from
Tottenham	151,731	17.27	11.49	.74	100	.94	3	1.10	72 deaths	... [Spec. Dis.
Wolverhampton	96,048	21.00	13.30	.81	82	1.15	3.08	1.05	.25	5 deaths from
York	78,492	14.80	12.30	.95	107	.92	.46	.95	.46	... [Syphilis
WIGAN	83,110	24.15	18.01	1.84	118	2.10	.04	1.46	.20	...

DEATH-RATE FOR WIGAN DURING THE LAST TEN YEARS.

1908	1909	1910	1911	1912	1913	1914	1915	1916	1917
16.97	18.28	14.55	18.27	15.92	18.42	17.09	19.17	15.42	16.18

Average for Ten Years, 17.02.

Infantile Mortality.—The number of deaths of children under one year is 240, or 118 per 1,000 births, and of children over one year and under five years 222, or 2.67 per 1,000 of the population.

These figures compare with 240 deaths under one year, a rate of 113 per 1,000 in 1916.

An analysis of these 240 deaths show that they may be grouped under the following headings :—

1.	Premature Birth, Congenital Debility, Malnutrition, and Congenital Malformations	...	...	...	...	...	...	...	91
2.	Diarrhœa	...	...	...	...	...	...	...	19
3.	Bronchitis	...	...	...	...	...	...	...	19
4.	Pneumonia	...	...	...	...	...	...	...	32
5.	Measles	...	...	...	...	...	...	...	11
6.	Whooping Cough	...	...	...	...	...	...	...	15
7.	Other causes	...	...	...	...	...	...	...	53

TABLE SHOWING METHOD OF FEEDING OF 240 INFANTS UNDER 1 YEAR,
WHO DIED DURING 1917.

116	Entirely breast-fed.
31	Partly breast-fed.
7	Condensed Milk.
21	Cow's Milk.
17	Dried preparations.
11	Miscellaneous.
37	No feeding (lived 1-2 days only).

Senile Mortality.—The number of deaths of persons of 60 years of age and over is 383, or 4·68 per 1,000 of population.

No. OF DEATHS IN DIFFERENT WARDS IN WIGAN, 1917.

Ward.	Census Pop'l'tion	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.	Rate.
1	4,905	45	20	20	18	103	20·99
2	5,295	28	15	16	13	72	13·59
3	7,586	57	17	18	33	125	16·47
4	9,795	57	30	17	34	138	14·08
5	4,382	22	18	11	32	83	18·94
6	5,413	17	22	11	16	66	12·19
7	4,836	31	18	12	23	84	11·37
8	12,378	53	40	28	32	153	12·36
9	7,384	30	19	21	14	84	11·37
10	3,536	24	16	5	8	53	14·98
11	4,188	25	17	14	6	62	14·80
12	7,379	28	23	29	25	105	14·22
13	5,962	30	13	14	17	74	12·41
14	6,113	21	19	23	14	77	12·59
Trans- ferable Deaths	...	15	22	13	16	66	...
	Total ...	483	309	252	301	1,345	16·18

STATEMENT OF DEATHS OF NON-RESIDENTS OCCURRING IN WIGAN.

Deaths from—	Years.			
Accidents.....	28	Under	1.....	4
Phthisis	13	1 and under	5.....	7
Cancer	11	5 „	15.....	11
Bronchitis	6	15 „	25.....	17
Other Diseases of Respiratory Organs	1	25 „	35.....	8
Heart Failure	16	35 „	45.....	12
Appendicitis	6	45 „	55.....	17
Pneumonia	15	55 „	60.....	13
Suicide	1	60 „	65.....	16
Other diseases	45	Over	65.....	37
	142			142

LOCAL GOVERNMENT BOARD RETURNS.

TABLE I.—VITAL STATISTICS OF WHOLE DISTRICT DURING 1917 AND PREVIOUS YEARS.
Name of District—Wigan County Borough.

Year.	Pop'tion estimated to middle of each year	Births			Total Deaths Registered in the District		Transferable Deaths		Nett Deaths belonging to the District			
		Un- corrected number	Nett		Number	Rate	of Non- residents registered in the District	of Resi- dents not registered in the District	Under 1 year of age		At all ages	
			Number	Rate					Number	Rate per 1,000 nett births	Number	Rate
1912...	90,504	2,564	2,588	28.59	1,375	15.26	74	139	324	125	1,441	15.92
1913...	91,573	2,529	2,544	27.78	1,636	17.86	83	134	456	179	1,687	18.42
1914...	92,868	2,690	2,710	29.18	1,527	16.44	105	166	377	139	1,588	17.09
1915...	86,329	2,375	2,384	26.13	1,598	18.51	94	151	390	163	1,655	19.17
1916...	83,203	2,095	2,108	23.28	1,318	15.84	114	80	240	113	2,108	15.42
1917...	83,110	2,010	2,024	21.84	1,424	17.13	145	66	240	118	1,345	16.18

*Calculated on Registrar-General's Estimated Population, July 1st, 1917—Deaths, 83,110 ; Births, 92,644.
Area of District in Acres (land and inland water), 5,072.
At Census, 1911 : Total population at all ages, 89,152 ; Total families or separate occupiers, 16,979.
(Figures given in Census special volume for the County, also in Vols. I., VI., and VIII. of the reports of the Census of England and Wales.)

TABLE II.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1917.
Name of District—Wigan County Borough.

Notifiable Disease.	Number of Cases Notified.							Total Cases notified in each locality (e.g., Parish or Ward) of the district.											Total cases removed to hospital.				
	At all ages.	At Ages—Years.						1st. George	2nd. Lindsay	3rd. Cath.	4th. St. Patrick	5th. St. Thomas	6th. Poolstock	7th. Victoria	8th. St. Andrew	9th. Swinley	10th. All Saints	11th. W. Pemb.		12th. N. Pemb.	13th. C. Pemb.	14th. S. Pemb.	
		Under 1	1 and under 5 yrs.	5 and under 15 yrs.	15 and under 25 yrs.	25 and under 45 yrs.	45 and under 65 yrs.																65 and up'rds.
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	40	2	20	13	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	48	...	...	4	6	11	21	6	...	8	2	...	3	7	6	4	2	3	3	2	6	...	...
Scarlet Fever	231	1	58	160	8	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	29	...	1	7	5	13	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever (R)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever (C)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	4	...	...	...	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis	2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neon.	23	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	2907	183	1682	1019	14	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pul. Tuberculosis	188	...	2	27	46	68	43	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Forms of Tuberculosis	134	3	24	70	24	11	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	3609	213	1790	1300	109	120	69	8	202	255	331	289	154	238	119	557	244	111	205	350	268	286	305

Isolation Hospital or Hospitals, Sanatoria, etc.—Wigan Sanatorium, Pemberton Hospital and Bowdon Sanatorium.

TABLE III.—DEATHS REGISTERED DURING THE CALENDAR YEAR 1917, CLASSIFIED BY AGE AND CAUSE.
Name of District—Wigan County Borough.

Causes of Death.	Nett Deaths at the Subjoined Ages of "Residents" whether occurring within or without the District.							Total Deaths whether of "residents" or "non-residents" in institutions in the district	
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.
1 All Causes—Certified	2	3	4	5	6	7	8	9	10
Uncertified	1345	240	119	103	65	67	171	295	28
...	...	...	...	...	...	...	...	...	...
1—Enteric Fever	...	...	...	...	...	...	...	...	...
2—Small-pox	...	...	...	...	...	...	...	...	...
3—Measles	77	11	30	25	11	...	...	...	...
4—Scarlet Fever	5	...	1	3	1	...	...	...	...
5—Whooping Cough	36	15	14	7	...	...	...	...	...
6—Diphtheria and Croup	6	...	1	4	1	...	...	...	...
7—Influenza	8	...	1	1	...	...	1	4	1
8—Erysipelas.....	3	1	...	1	...	1	...	...	...
9—Phthisis (Pul. Tub.)	122	...	...	...	10	28	49	28	7
10—Tuberculous Meningitis	18	2	1	6	7	2	...	1	...
11—Other Tubercular Diseases ...	17	2	3	2	2	5	2	39	...
12—Cancer (Malignant Disease)...	55	...	...	...	...	1	3	4	12
13—Rheumatic Fever	8	...	...	1	1	1	1	1	...
14—Meningitis.....	10	1	3	3	1	1	...	1	...
15—Organic Heart Disease	73	2	...	...	1	...	13	29	28
16—Bronchitis.....	133	19	8	3	2	1	9	37	54
17—Pneumonia (all forms)	175	32	30	28	6	3	23	38	15
18—Other Diseases of Resp. Org.	4	...	1	1	...	...	...	...	2
19—Diarrhoea and Enteritis	41	29	12	...	...	...	...	...	...
20—Appendicitis and Typhilitis	4	...	...	...	2	1	1	...	...

TABLE IV.—INFANT MORTALITY, 1917. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER 1 YEAR OF AGE.
Name of District—Wigan County Borough.

Cause of Death.	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	4 weeks & under 3 months	3 months & under 6 months	6 months & under 9 months	9 months & under 12 m'ths	Total Deaths under 1 year
All Causes—Certified	49	13	13	8	83	44	39	39	35	240
Uncertified	...	...	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	2	5	4	11
Scarlet Fever	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	...	4	4	7	15
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...
Erysipelas.....	...	...	...	...	...	...	...	1	...	1
Tuberculous Meningitis	...	...	...	...	...	...	...	1	...	2
Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases	...	...	...	...	...	...	1	1	...	2
Meningitis (<i>not Tuberculous</i>)	...	...	...	1	1	...	...	...	...	1
Convulsions	...	...	1	1	2	1	...	1	4	8
Laryngitis.....	...	...	...	...	...	...	...	...	...	...
Bronchitis.....	...	2	2	...	4	6	4	3	2	19
Pneumonia (<i>all forms</i>)	...	...	...	2	2	3	4	15	8	32
Diarrhoea	...	...	1	...	1	7	3	4	4	19
Enteritis	...	...	...	...	...	1	5	2	2	10
Gastritis	...	...	...	...	...	1	2	...	...	3
Syphilis	...	...	...	...	...	1	...	...	...	1
Rickets	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying	...	...	...	...	...	...	...	...	...	...
Injury at Birth	1	...	...	...	1	...	...	...	...	1
Atelectasis	2	...	...	...	2	...	...	...	...	2
Congenital Malformations	7	1	1	...	9	5	1	...	...	15
Premature Birth	26	4	1	1	32	3	...	...	...	35
Atrophy, Debility and Marasmus	7	3	4	3	17	14	9	...	1	41
Other Causes	6	3	3	...	12	2	4	2	2	22
TOTAL	49	13	13	8	83	44	39	39	35	240

Nett Births registered during the calendar year—Legitimate, 1,932; Illegitimate, 92.
Nett Deaths registered during the calendar year—Legitimate Infants, 228; Illegitimate Infants, 12.

Inquests and Uncertificated Deaths.

The number of Inquests for 1917 is 135 against 131 for 1916 and 147 for 1915, and the following verdicts have been recorded :—

1. Natural Causes	60
2. Accidents—burnt	12
„ scalded	5
„ colliery	19
„ vehicle or car	—
„ drowned.....	8
„ falls	3
„ railway.....	6
„ mill	—
„ fall downstairs	4
„ others	10
3. Suicides—cut throat	1
„ drowned	1
„ hanging.....	2
„ others	2
4. Others	2
5. Murder	—
	135

We have no uncertified deaths in 1917 against 1 in 1916 and 2 in 1915.

DEATHS OCCURRING AMONGST SOLDIERS.

These were 5 in number ; one being from Nephritis, one each from Apoplexy, Pulmonary Tuberculosis, Cerebro-spinal Meningitis, and injuries through fall over iron railings.

Acute Infectious Diseases.

I.—ZYMOTIC DISEASES.

The Mortality from the seven principal Zymotic Diseases, namely, Small-pox, Scarlet Fever, Measles, Whooping Cough, Fever (Enteric and Typhus), Diphtheria, and Diarrhœa, gives us a rate of 1·84 per 1,000 of the population against 1·04 in 1916.

The deaths numbered 153 as against 87 in 1916.

The epidemic of Scarlet Fever which marked the previous year has subsided, and was the cause of only 5 deaths as against 15.

On the other hand, there has been a very serious increase of Measles, which has caused 77 deaths during the year.

Only 29 cases of Enteric Fever were notified, and there were no deaths from this cause.

There was also a satisfactory decline in the number of deaths from Diarrhœa.

The treatment of Phthisis has proceeded on the same lines as in previous years, and particulars will be found in the Tuberculosis Officer's report.

The Zymotic-rate, 1·84, is made up as follows :—

DEATH-RATES PER 1,000		
	1917	1916
Small-pox	...	...
Scarlet Fever	·06	·18
Measles	·92	·01
Whooping Cough	·43	·04
Typhus Fever	...	...
Enteric Fever	...	·22
Diphtheria	·07	·09
Diarrhœa	·34	·42

The Zymotic-rate during each of the four quarters was :—

	1917	1916
1st Quarter	3·06	1·15
2nd „	·90	·95
3rd „	1·71	1·43
4th „	1·61	·88

TABLE OF ZYMOTICS.

	Notified.	Died.	Case Mortality %.
Small-pox	...	...	...
Scarlet Fever	231	5	2·16
Enteric Fever	29	...	...
Diphtheria	40	6	·15
Measles	2,907	77	2·78
Whooping Cough	...	36	...
Diarrhœa	...	29	...

The following table shows comparatively the Sickness Rates per 1,000 of the population of the principal Infectious Diseases in England and Wales, and in Wigan, during the year 1917 :—

	England & Wales. No. of Cases Notified.	England and Wales.	Wigan.
Tuberculosis (Pulmonary)	73,654	2·18	2·26
Tuberculosis (other forms)	22,096	0·66	1·61
Small-pox	7	0·00	...
Typhus Fever	4	0·00	...
Scarlet Fever	48,817	1·45	2·77
Diphtheria	43,315	1·28	·48
Enteric Fever	4,601	0·14	·33
Puerperal Fever	1,345	0·04	·04
Erysipelas.....	13,325	0·40	·57
Cerebro-Spinal Fever	1,465	0·04	·02
Poliomyelitis	357	0·01	·03
Continued Fever	58	0·00	...
*Ophthalmia Neonatorum.....	6,716	10·05	·24
Measles and German Measles	533,833	15·84	34·97

*Rate per 1,000 Births.

Number of Notifications, including Civil and Military Cases, compared with other years :—

Disease.	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917
Small-pox	0	0	0	7	0	0	0	0	0	0
Typhus	0	0	0	0	0	1	1	0	0	0
Scarlet.....	220	730	395	176	142	71	222	1608	820	231
Enteric	103	93	128	151	73	97	67	45	89	29
Continued	0	0	0	0	0	0	0	0	0	0
Diphtheria	36	34	38	66	38	34	43	37	37	40
Puerperal	12	8	4	7	4	6	5	4	6	4
Cholera	0	0	0	0	0	0	0	0	0	0
Erysipelas.....	71	75	70	84	47	56	82	83	60	48
Ophthalmia Neonatorum.....	0	0	0	0	6	0	0	1	13	23
Acute Poliomyelitis	0	0	0	0	6	0	0	1	0	3
Cerebro-Spinal Meningitis	0	0	0	0	0	0	1	0	0	2
Measles	0	0	0	0	0	0	0	0	285	2907
Pulmonary Tuberculosis	0	0	0	0	217	207	236	233	178	188
Other Forms of Tuberculosis	0	0	0	0	0	61	124	107	92	134
Total	442	940	635	941	553	549	803	2151	1580	3609

ANALYSIS OF NOTIFICATIONS, 1917.

Disease.	Jan.	Feb.	Mar.	Apr.	May	Jun.	J'ly.	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Scarlet Fever	28	17	20	9	22	24	17	20	22	17	24	11	231
Enteric Fever	1	4	2	3	1	1	4	2	3	4	4	—	29
Diphtheria	4	5	9	4	1	2	1	3	—	3	5	3	40
Puerperal Fever...	1	—	—	—	—	1	—	1	—	—	1	—	4
Erysipelas.....	5	3	7	9	5	2	4	1	1	3	4	4	48
Cerebro-Spinal Meningitis.....	—	—	1	—	—	—	—	—	—	—	1	—	2
Ophthalmia Neon. Acute	1	2	2	2	3	2	3	1	5	1	1	—	23
Poliomyelitis ...	—	—	—	—	—	1	1	1	—	—	—	—	3
Measles	210	820	758	174	132	245	187	94	46	89	114	38	2907
Phthisis.....	15	15	19	30	31	11	19	15	8	10	2	13	188
Other Tubercular Diseases	18	18	13	13	31	4	18	4	1	1	9	4	134
Total	283	884	831	244	226	293	234	142	86	128	165	73	3609

SMALL-POX.

We have had no cases of Small-pox during the year.

VACCINATION RETURNS, 1915-1916.

The following Vaccination Returns have been supplied to me by the Vaccination Officer, Mr. R. Halliwell, J.P. :—

	1916	1915
Births Registered	1466	1743
Successfully Vaccinated	662	761
Insusceptible	1	3
Exemptions, Section 2, 1899	642	741
Died, Unvaccinated	104	140
Postponed by Certificates	...	...
Left Town and Reported to other Districts	1	8
Cannot Trace	5	23
Refusals and Not Accounted for.....	51	67

Total Number of Successful Vaccinations (all ages)	1908.....	1738
„ „ „	1909.....	1371
„ „ „	1910.....	1266
„ „ „	1911.....	1118
„ „ „	1912.....	1153
„ „ „	1913.....	895
„ „ „	1914.....	860
„ „ „	1915.....	860
„ „ „	1916.....	769
„ „ „	1917.....	736

The continued decline in the number of infants vaccinated is most regrettable, and should Small-pox appear in the Borough will have its inevitable consequence.

SCARLET FEVER.

Number of Notifications.....	231
Number of Deaths.....	5
Death-rate per 1,000	·06

The number of notifications of this disease is, for 1917, 231, against 820 in 1916. Five deaths occurred, giving a rate of ·06 as against 15 deaths with a rate of ·18 in 1916.

1917	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Notifications	28	17	20	9	22	24	17	20	22	17	24	11	231
Removed to Hospital	14	9	15	6	19	15	15	15	16	13	18	7	162
Deaths	1	—	—	—	—	1	1	—	1	1	—	—	5

The percentage of removals to Sanatorium has been 70·01 against 57·68 in 1916 and 52·23 in 1915.

We have 5 deaths amongst those notified ; 4 occurred in hospital ; giving a fatality-rate of 2·46 of hospital-treated cases as against 1·90 in 1916.

MEASLES.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Deaths in 1917 ...	4	28	17	9	2	6	3	3	2	1	2	—	77
Deaths in 1916 ...	1	—	—	—	—	—	—	—	—	—	—	—	1
Notifications, 1917	210	820	758	174	132	245	187	94	46	89	114	38	2907

WHOOPIING COUGH.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Trans.	Tot.
Deaths in 1917	1	5	4	1	—	—	1	—	—	2	2	20	—	36
Deaths in 1916	—	—	1	—	—	1	1	—	1	—	—	—	—	4

ENTERIC FEVER.

Number of Notifications.....	29
Number of Deaths.....	—
Mortality per 1,000 of Population	—
Removed to Sanatorium	29

We have for 1917, 29 notifications against 89 in 1916 and 45 in 1915. A few of the cases removed to the Sanatorium turned out to be cases of other febrile diseases.

We had no deaths in 1917 against a rate of 21·34 per cent. in 1916 and 20·00 per cent. in 1915.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Trans.	Tot.
Notifi- cations	1	4	2	3	1	1	4	2	3	4	4	—	—	29
Removed to San'm	2	4	3	3	1	1	2	1	3	4	5	—	—	29
Deaths ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—

We had 46 specimens of blood examined at the Thompson-Yates Laboratory, Liverpool, with the following result:—Positive re-action, 23; negative re-action, 23.

INCIDENCE OF ENTERIC FEVER FOR TEN YEARS.

	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917
Notified Cases	103	93	128	151	73	97	67	45	89	29
Deaths	26	18	26	29	12	13	17	10	19	—
Death rate per 1,000	·28	·19	·27	·32	·13	·14	·18	·11	·22	—

AGE INCIDENCE—YEARS.

1-4	5-9	10-14	15-19	20-24	25-29	30 & Over.
1	4	3	5	—	2	14

Total Cases, 29.

The age incidence shows the greatest number of cases has occurred in persons of 30 years and over, and the next larger in cases from 15 to 19 years.

Houses in which cases have occurred with—

Privy Middens	11
Pails	10
Waste Water Closets.....	—
Water Closets	8

Number of Privy Middens, Ashpits and Cesspools in Wigan	7
" " Pemberton	1580

ENTERIC FEVER.

Cases in Houses with Insanitary Conditions and Surroundings	3
„ Other Defects	4
„ where No Defects were found	22
	—
	29
	—

List of Streets in Wigan where cases of Enteric Fever have occurred :—

Baron Street	2	Lower Morris Street	1
Bold Street	1	Margaret Street	1
Derby Street.....	1	New Square	2
Eleanor Street	1	Park Road	1
Field Street.....	1	Rylands Street	1
Foundry Street	1	Wigan Lane	1
Great George Street	1	Woodhouse Lane	1
Holme Terrace	2		

List of Streets in Pemberton where cases of Enteric Fever have occurred :—

Carlton Street.....	1	New Row	1
City Road	2	Turner's Yard	1
Gaskell's Yard	1	Warrington Road	1
Marsh Green	3	Wood Street	1

DIARRHŒA.

	1917	1916
Number of Deaths.....	29	40
Mortality per 1,000 of Population	·34	·48

AGE INCIDENCE, 1917.

	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
0-1 year	-	-	-	-	-	-	3	9	6	1	-	-	19
1-5 years	-	1	-	-	-	-	1	3	3	1	1	-	10
Over 5 years	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	1	-	-	-	-	4	12	9	2	1	-	29

DIPHTHERIA.

Number of Notifications.....	40
Number of Deaths, including Croup	6
Mortality per 1,000 of Population	·07

We have had a larger number of cases notified, namely, 40 against 37 in 1916 ; and the mortality is ·07 per 1,000 of the population against ·09 in 1916.

The following table shows the number of cases notified and the number of deaths :—

1917	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sept	Oct.	Nov.	Dec.	Tot.
Notified.....	4	5	9	4	1	2	1	3	-	3	5	3	40
Deaths	1	1	1	-	1	-	-	-	-	1	1	-	6

The following is the result of the examinations bacteriologically made at the Thompson-Yates Laboratory :—

Number of Swabs	23
Diphtheria present in	19

DIPHTHERIA CASES, 1917.

Cases in Houses—Sanitary Defects	7
„ „ No Defects	33

II.—Other Infectious Diseases.

CEREBRO-SPINAL FEVER & ACUTE POLIOMYELITIS.

Two cases of Cerebro-spinal Fever and 3 cases of Poliomyelitis were notified.

ERYSIPELAS.

Number of Cases Notified	48
Number of Deaths.....	3
Mortality per 1,000 of Population	·03

We have a smaller number of notifications than in 1916, and we have 3 deaths.

Cases in Houses with Insanitary Surroundings	1
„ Defects	3
„ No Defects	44

PUERPERAL FEVER.

Number of Cases Notified	4
Number of Deaths.....	2
Mortality per 1,000 of Population.	·02

VENEREAL DISEASES.

The scheme for the Diagnosis and Treatment of Venereal Diseases is now fully established, and particulars will be found below :—

ROYAL ALBERT EDWARD INFIRMARY,
WIGAN.

VENEREAL DISEASES.

ANNUAL RETURN relating to PERSONS DISCHARGED from the Treatment Centre during the year ending on the 31st December, 1917.

Return of Persons who were discharged after the completion of treatment during the year ending 31st December, 1917, and who resided in the County or County Borough of Wigan.

Treatment Centre at Royal Albert Edward Infirmary, Wigan.

	Syphilis		Soft Chancre		Gonorrhœa		Total	
	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of persons who were discharged as above	32	14	—	—	3	1	36	15
2. Total duration of treatment of such persons in days	138	145	6	—	8	4	152	149
3. Aggregate number of attendances of such persons at Out-patient Clinic	5	5·5	—	—	—	—	5·8	5·7
4. Number of such persons who were treated as in-patients	—	—	—	—	—	—	—	—
5. Aggregate number of “ in-patient days ” for such persons	—	—	—	—	—	—	—	—
6. Number of such persons treated with Salvarsan substitutes...	31	14	1	—	—	—	32	14
7. Number of doses given of such substitutes	145	74	3	—	—	—	148	74

ADDENDUM.

Number of persons who were under treatment at the Out-patient Clinic, but who ceased to attend before treatment was completed	3	2	—	—	—	—	—	—
---	---	---	---	---	---	---	---	---

January 21st, 1918.

(Signed) R. PROSSER WHITE,
Medical Officer of the
Treatment Centre.

ROYAL ALBERT EDWARD INFIRMARY,
WIGAN.

VENEREAL DISEASES.

ANNUAL RETURN by the Medical Officer of Health of the Treatment Centre. To the Medical Officer of Health of the County or County Borough of Wigan.

Return relating to persons residing in the County or County Borough of Wigan who were treated at the Treatment Centre at Wigan Infirmary during the year ending on the 31st December, 1917.

1. Number of persons dealt with at or in connection with the Out-patient Clinic for the first time and found to be :—

	<i>Males.</i>	<i>Females.</i>
Suffering from Syphilis	37	21
„ Soft Chancre	1	—
„ Gonorrhœa	3	1
Not suffering from Venereal Disease	2	1
Total	<u>43</u>	<u>23</u>

2. Number of persons discharged from the Out-patient Clinic after completion of treatment for :—

	<i>Males.</i>	<i>Females.</i>
Syphilis	32	14
Soft Chancre	1	—
Gonorrhœa	3	1
Total	<u>36</u>	<u>15</u>

3. Number of persons who ceased to attend the Out-patient Clinic without completing treatment and who were suffering from :—

	<i>Males.</i>	<i>Females.</i>
Syphilis	3	2
Soft Chancre	—	—
Gonorrhœa	—	—
Total	<u>3</u>	<u>2</u>

4. Total attendances of all persons at the Out-patient Clinic who were :—

	<i>Males.</i>	<i>Females.</i>
Suffering from Syphilis	136	144
„ Soft Chancre	6	—
„ Gonorrhœa	8	4
Not found to be suffering from Venereal Disease.....	2	1
Total	<u>152</u>	<u>149</u>

5. Aggregate number of "in-patient days" of treatment given to persons suffering from :—

	<i>Males.</i>	<i>Females.</i>
Syphilis (commences on Feb. 1st, 1918).....		
Gonorrhœa do.	—	—
Total	==	==

6. Number of persons treated with Salvarsan Substitutes
- | | <i>Males.</i> | <i>Females.</i> |
|--|---------------|-----------------|
| | 32 | 14 |
| | == | == |

7. Number of doses of Salvarsan Substitutes given :—

<i>Name of Drug.</i>	<i>Number of Doses.</i>
Hectine dose 40 c.g.	66
Galyl dose 40 c.g.	96
Neo. Salvarsan dose .06 grm.....	60
Lambkin dose m.m.	114

8. Examinations of Pathological Material :—

- (a) Specimens from persons attending at the Treatment Centre which were examined at this Centre :—

	<i>Number.</i>
For detection of Spirochetes	—
„ detection of Gonococci	—
„ Wassermann re-action.....	2
Others	—
Total	2
	==

- (b) Specimens from persons attending at the Treatment Centre which were sent for examination to an independent laboratory :—

	<i>Number.</i>
For detection of Spirochetes	2
„ detection of Gonococci	—
„ Wassermann re-action.....	—
Others	15
Total	17
	==

(Signed) R. PROSSER WHITE,

*Medical Officer of the
Treatment Centre.*

January, 1918.

ROYAL, ALBERT EDWARD INFIRMARY,
WIGAN.

VENEREAL DISEASES.

ANNUAL STATEMENT showing services rendered at the Treatment Centre for persons residing in the several Counties and County Boroughs served by the Centre, together with particulars of the total cost of the work of the Centre, during the year ending on the 31st December, 1917.

County or County Borough.	No. of Attendances at out-patient Clinic.	Aggregate No. of "in-patient days."	No. of doses of Salvarsan substitutes used in Treatment Centre.	No. of examinations of Pathological Material made at Treatment Centre.			
				S.	G.	W.	O.
Wigan.....	301	—	222	—	—	2	—
Total.....	301	—	222	—	—	2	—

s, for detection of Spirochetes.
g, for detection of Gonococci.
w, for Wassermann re-action.
o, Other Tests.

£ s. d.

Total cost of Out-patient Clinic 142 14 7

Total cost of In-patient Treatment

Cost of examination of Pathological Material made at Treatment Centre (where separate accounts are kept) :—

£ s. d.

1. For detection of Spirochetes

2. For detection of Gonococci.....

3. For Wassermann re-action

4. For Other Tests

£ s. d.

Cost of Salvarsan Substitutes used at Treatment Centre

(Signed) R. PROSSER WHITE,

*Medical Officer of the
Treatment Centre.*

January, 1918.

The Work of the Hospitals.

I.—HOSPITAL FOR ACUTE INFECTIOUS CASES, WHELLEY.

109 Beds.

RESIDENT STAFF IN 1917.

Matron.

Housekeeper.

5 Nurses.	2 Ward-maids.
7 Probationers.	1 Kitchen-maid.
1 Laundress.	1 Scullery-maid.
2 Assistant Laundresses.	1 Porter and Gardener.
1 House-maid Waitress.	1 Assistant Gardener.

	Notifications	Removed to Hospital		Died in Hospital	
		Wigan patients.	Out-dist. patients.	Wigan patients.	Out-dist. patients.
Small-pox	...	...	...	...	...
Typhus	...	...	...	...	...
Scarlet Fever	231	166	7	4	...
Enteric	29	29	14	...	2
Diphtheria	40	...	...	1	...
Puerperal Fever	4	...	...	...	...
Cholera	...	...	...	...	...
Membranous Croup.....	...	...	...	...	...
Erysipelas.....	48	...	...	...	...
Ophthalmia Neonatorum.....	23	...	...	...	...
Acute Poliomyelitis	3	...	...	...	...
Cerebro-Spinal Meningitis	2	...	...	...	...
Pulmonary Tuberculosis	188	113	28	11	1
Other Tuberculosis	134	...	...	...	...
*Others.....	...	43	2	2	...
Measles	2907	...	...	5	...
Totals	3609	351	51	23	3
		402		26	

* The 43 Others include Diphtheria and Measles.

In the Whelley Hospital on December 31st, 1917, there were 23 patients, namely, Scarlet Fever 16, Enteric Fever 3, other diseases 4.

Whelley Hospital.	Small-pox.	Scarlet.	Enteric.	Others.	Total.
In-patients, Jan. 1, 1917....	...	44	7	...	51
Admitted in 1917	...	173	43	45	261
Discharged „	...	197	42	24	263
Died „	...	4	2	20	26
In-patients, Jan. 1, 1918....	...	16	3	4	23

The number of deaths in the Whelley Hospital was 26 ; 4 died from Scarlet Fever, 2 from Enteric, and 20 from other diseases, as against 9 deaths from Scarlet Fever, 13 from Enteric Fever, and 3 from other diseases, in 1916.

WHELLEY SANATORIUM—TABLE OF ADMISSIONS AND DISCHARGES FOR 1917.

1917.	Admitted.					Discharged.					Died.							
	Small-pox	Scarlet Fever	Enteric	Ty-phus	Others	Total	Small-pox	Scarlet Fever	Enteric	Ty-phus	Others	Total	Small-pox	Scarlet Fever	Enteric	Ty-phus	Others	Total
January ...	...	13	2	...	1	16	...	33	7	...	...	40	...	...	...	...	...	...
February ...	...	12	4	...	8	24	...	22	2	...	...	24	...	...	...	...	1	1
March	...	15	5	...	10	30	...	12	2	...	7	21	...	...	...	...	4	4
April	...	7	5	...	7	19	...	8	9	...	5	22	...	...	1	...	2	3
May	...	18	2	...	3	23	...	10	1	...	3	14	...	...	...	...	2	2
June	...	17	3	...	2	22	...	18	...	...	1	19	...	1	...	...	1	2
July	...	18	4	...	3	25	...	18	3	...	2	23	...	...	...	...	1	1
August	...	16	4	...	2	22	...	17	3	...	4	24	...	1	1	...	2	4
September .	...	17	3	...	1	21	...	19	5	...	...	24	...	2	...	...	2	4
October	...	15	5	...	3	23	...	14	2	...	1	17	...	...	...	...	3	3
November .	...	18	6	...	3	27	...	11	5	...	...	16	...	...	...	...	1	1
December...	...	7	...	...	2	9	...	15	3	...	1	19	...	...	...	...	1	1
Total...	...	173	43	...	45	261	...	197	42	...	24	263	...	4	2	...	20	26

7 cases of Scarlet Fever, 14 Enteric, 1 Cerebro-Spinal Fever, and 1 Measles were removed from Outside Districts to the Sanatorium, and are included in the Table.

2.—PEMBERTON CONSUMPTION HOSPITAL.

22 Beds.

STAFF.

Sister-in-Charge.

2 Assistant Nurses.

Ward-maid.

Cook.

Porter-Gardener.

Laundress.

Assistant-Gardener.

Kitchen-maid.

PARTICULARS OF ADMISSIONS AND DISCHARGES.

BOROUGH PATIENTS.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Admitted	59	21	3	12	5	14	114
Discharged.....	55	19	2	14	5	9	104
Died	1	2	—	—	—	2	5

COUNTY PATIENTS.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Admitted	4	4	3	10	3	5	29
Discharged.....	7	3	4	13	—	1	28
Died	—	—	—	—	—	1	1

TOTAL PATIENTS TREATED.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Admitted	63	25	6	22	8	19	143
Discharged.....	62	22	6	27	5	10	132
Died	1	2	—	—	—	3	6

Patients in on January 1st, 1917.....	15
„ admitted 1917.....	143
„ discharged 1917.....	132
„ died 1917.....	6
„ remaining January 1st, 1918.....	20

6 patients left the Hospital on their own accord.

Transferred to Whelley, 4. To Bowdon, 1.

CONDITION OF DISCHARGE.

BOROUGH PATIENTS.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Improved	43	17	2	10	3	7	82
Non-improved	12	2	—	4	2	2	22
Total.....	55	19	2	14	5	9	104

COUNTY PATIENTS.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Improved.....	2	1	2	8	—	1	14
Non-improved.....	5	2	2	5	—	—	14
Total.....	7	3	4	13	—	1	28

TOTAL PATIENTS DISCHARGED.

	Insured.		Non-Insured.		Children under 16.		Total.
	M.	F.	M.	F.	M.	F.	
Improved	45	18	4	18	3	8	96
Non-improved	17	4	2	9	2	2	36
Total.....	62	22	6	27	5	100	132

Maternity and Child Welfare.

The following table gives a summary of the visits of the four women health visitors during 1917.

TABLE 1.—TOTAL VISITS IN WARDS.

Wards.	Births.	Re-visits to Births.	Deaths under 5.	Diarrhoea deaths under 2.	Midwives.	Measles.	Whooping Cough.	Ophthalmia.	Other Infectious Diseases.	Special Visits.	Totals.
No. 1—St. George	110	680	44	2	6	239	...	1	1	9	1,092
No. 2—Lindsay.....	160	527	31	1	9	351	...	5	...	27	1,111
No. 3—St. Catharine ...	186	613	41	2	6	553	...	3	...	25	1,429
No. 4—St. Patrick	262	522	46	2	12	603	...	4	...	51	1,502
No. 5—St. Thomas	115	492	28	3	2	212	1	...	...	27	880
No. 6—Poolstock	122	378	30	...	8	336	...	...	...	34	908
No. 7—Victoria.....	123	529	28	3	8	126	...	1	...	39	857
No. 8—St. Andrew.....	228	953	32	3	15	696	...	2	...	41	1,970
No. 9—Swinley	83	334	20	...	12	297	...	2	...	29	777
No. 10—All Saints	74	272	11	...	5	176	...	...	...	148	686
No. 11—W. Pemberton ...	97	217	32	2	5	183	10	...	23	13	572
No. 12—N. Pemberton...	185	431	34	5	1	541	...	1	...	54	1,252
No. 13—C. Pemberton ...	119	298	17	2	5	285	...	1	...	58	785
No. 14—S. Pemberton ...	160	496	35	1	21	49	...	1	...	31	794
Totals	2024	6742	429	26	115	4647	11	21	24	586	14,625

Ninety-three sanitary defects were reported to the Chief Sanitary Inspector.

CLINICS.

The following tables give statistical details of the work done at the Clinics :—

TABLE 2.

ATTENDANCES AT BABY CLINIC.

Total attendances of Babies and Mothers	2,767
Primary ,, ,, ...	289

TABLE SHOWING ATTENDANCES.

Weekly	57
Fortnightly	30
Monthly	10
Irregularly.....	243
Once Only	289
Total	629

The children came from the following Wards :—

Wards.	No. of Children.	Wards.	No. of Children.
No. 1—St. George	56	No. 8—St. Andrew	84
No. 2—Lindsay	51	No. 9—Swinley	25
No. 3—St. Catharine	55	No. 10—All Saints	37
No. 4—St. Patrick	78	No. 11—West Pemberton ...	24
No. 5—St. Thomas	4	No. 12—North „ ...	37
No. 6—Poolstock	41	No. 13—Central „ ...	43
No. 7—Victoria	42	No. 14—South „ ...	13
		Outside the Borough	37
		Total	627

Talks and Demonstrations :—

Subjects.—Hygienic clothing for infants ; advantages of breast-feeding ; infantile ailments ; infectious diseases ; first-aid bandaging ; poultice making ; peptonized milk ; whey ; albumen water ; patterns of hygienic clothing cut out and given to the mothers. Danger of dummy teats.

The Central Clinic has continued at the School Clinic, Rodney Street, kindly lent free of cost by the Education Authority. The work has grown, however, so much that already the premises are too small. An extra room is needed, and the provision of better accommodation should be carefully considered in the near future. Meetings have been held twice weekly, on Monday and Thursday afternoons.

The Clinic at Pemberton has been transferred from the Consumption Hospital to excellent premises at 15, Billinge Road. This house was formerly occupied by a photographer, and the large studio at the rear is admirably suited for our purpose. Meetings are held here also on Tuesday and Friday afternoons.

MIDWIVES' ACT, 1902.

Forty-four midwives were registered, as practising within the Borough, all of whom have been regularly visited at their homes, and followed when out to their cases. Their bags and appliances were also examined.

Twenty-three cases of Ophthalmia Neonatorum were notified, and careful instruction was given to the mothers as to the correct way to carry out the doctor's treatment.

The following table shows particulars of Notifications of Births received :—

	Doctors	44 Midwives.		Total.
		31 Qualified.	13 Unqualified.	
No. of Births attended by	295	1206	490	1991
Percentage	14·	60·57	24·61	...
No. of Medical Aid Forms received	...	264	91	355
No. of Still-births Notified	4	32	14	50

Of the 44 midwives, 7 reside outside the Borough.

The reasons for sending for medical aid, as far as can be ascertained, are as follows :—

(1) *Complications of Pregnancy*, namely :—Abortion, 6 ; Miscarriage, 2 ; Prematurity, 21 ; Eclampsia, 4 ; Hæmorrhoids, 1 ; total 34.

(2) *Abnormal Presentations*, 31.

(3) *Complications of Labour*, namely :—Delayed Labour, 66 ; Contracted Pelvis, 10 ; Obstructed Labour, 6 ; Uterine Inertia, 4 ; Ante-partum Hæmorrhage, 10 ; Retained Membranes, 4 ; Adherent Placenta, 12 ; Post-partum Hæmorrhage, 14 ; Ruptured Perineum, 44 ; Retained Placenta, 1 ; Patient's Request, 1 ; Inversion of Uterus, 1 ; total 173.

(4) *Complications of Puerperium and other Illnesses of Patient*, namely :—Rise of Temperature and Rapid Pulse, 14 ; Inflammation of Breast, 1 ; Patient Ill (undefined), 9 ; Various, 16 ; Collapse, 1 ; total 41.

(5) *Illness and Abnormalities of Child*, namely :—Malformation, 4 ; Baby Ill (undefined), 14 ; Icterus Neonatorum, 1 ; Dangerous Feebleness, 18 ; Baby's Eyes, 25 ; Circumcision, 8 ; Asphyxia, 3 ; Cephalhœmatoma, 1 ; Spina Bifida, 1 ; Hare-lip Cleft Palate, 1 ; total 76.

PUERPERAL FEVER.

There have been 4 cases and 2 deaths from Puerperal Fever as compared with 6 cases and 2 deaths in 1916.

In one of the deaths a midwife had been attending the woman.

There have been 2 breaches of the rules by midwives.

III.—Tuberculosis.

The number of deaths from Phthisis is 122 against 86 in 1916 and 95 in 1915. The number of deaths from other Tubercular affections is 35 against 30 in 1916 and 31 in 1915.

The rates are as follows :—

Phthisis Pulmonalis.....1·46 per 1,000 of population.
Other Tuberculous Diseases. ·41 ,, ,,

If taken together as Tuberculous affections, we have 157 deaths, or a rate of 1·87 per 1,000 of population.

PULMONARY PHTHISIS & TUBERCULOUS DISEASES.

The deaths occurred in the following Wards :—

Wards.	Phthisis.	Other Tubercular Diseases.	Total.
No. 1—St. George	8	4	12
No. 2—Lindsay.....	6	2	8
No. 3—St. Catharine	18	2	20
No. 4—St. Patrick	15	4	19
No. 5—St. Thomas	8	—	8
No. 6—Poolstock	2	1	3
No. 7—Victoria.....	7	3	10
No. 8—St. Andrew.....	11	5	16
No. 9—Swinley	10	2	12
No. 10—All Saints	3	2	5
No. 11—West Pemberton	5	4	9
No. 12—North Pemberton	7	1	8
No. 13—Central Pemberton	5	1	6
No. 14—South Pemberton	2	2	4
Transferable Deaths	15	2	17
Totals	122	35	157

The following table shows the Comparative figures for 1914, 1915, 1916, and 1917, as regards Pulmonary cases :—

	1914	1915	1916	1917
Number of Notifications	212	233	178	188
Deaths	89	95	86	122
Fatality-rate per cent.	41·98	40·77	48·31	64·89
Death-rate per 1,000	·95	1·10	1·03	1·46

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1911 & 1912.

SUMMARY OF NOTIFICATIONS DURING 1917.

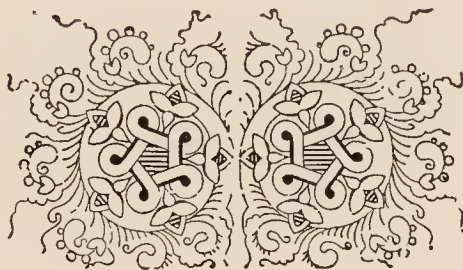
Age Periods.	Number of Notifications on Form A.											Number of Notifications on Form B.				Number of Notifications on Form C.			
	Primary Notifications.											Total Notifications (i.e. including cases previously notified by other doctors)	Primary Notifications.			Total Notifications (i.e. including cases previously notified by other doctors)	Poor Law Insti- tutions	Sana- toria	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 & up- wds.		Tot	un- der 5	5 to 10				10 to 15
Pul. Males	—	2	8	6	7	12	12	18	17	10	2	94	95	—	—	—	—	5	2
„ Females	—	—	9	4	8	19	21	13	12	1	—	87	88	—	—	—	—	2	16
Non-pul. Males ...	1	13	27	21	6	3	2	5	1	—	—	79	84	—	—	—	—	1	—
„ Females	1	10	10	13	11	3	3	2	—	—	—	53	60	—	—	—	—	—	—

(Signature) FRED E. WYNNE, B.A., M.B., D.P.H.,
MEDICAL OFFICER OF HEALTH.

CASES OF TUBERCULOSIS (ALL FORMS) NOTIFIED IN 1917.

Wards.	Population, Census 1911	Pulmonary Tuberculosis	Other forms of Tuber'losis	Totals
No. 1—St. George	4,905	9	9	18
No. 2—Lindsay	5,295	10	9	19
No. 3—St. Catharine.....	7,586	15	9	24
No. 4—St. Patrick.....	9,795	22	27	49
No. 5—St. Thomas	4,382	12	8	20
No. 6—Poolstock	5,413	11	9	20
No. 7—Victoria	4,836	14	12	26
No. 8—St. Andrew	12,378	33	13	46
No. 9—Swinley	7,384	18	6	24
No. 10—All Saints.....	3,536	8	2	10
No. 11—West Pemberton	4,188	11	12	23
No. 12—North „	7,379	5	3	8
No. 13—Central „	5,962	8	9	17
No. 14—South „	6,113	12	6	18
Totals	89,152	188	134	322

The work of the Dispensary is described in the report of the Tuberculosis Officer.



Report of the Tuberculosis Officer.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I beg to present my Fifth Annual Report, necessarily brief, in existing circumstances, of the work done for the Corporation at and in connection with the Joint Tuberculosis Dispensary during 1917. The more essential portions of the work have been continued, though, as I reported last year, the whole of the developments and extensions, including research work, which I had contemplated, have been necessarily postponed, and very few contacts have been examined.

The medical practitioners have continued to avail themselves of the advantages that the Dispensary affords, and our relations continue of a cordial nature. One hundred and ninety-eight borough cases, including 22 army "requests," were referred by them to me during the year, and they were encouraged to send sputum of doubtful cases. Similarly, 484 county patients were referred to me by their doctors for diagnosis, etc.

SANATORIUM BENEFIT.

The number of applications received during 1917 was 99, and as in previous years nearly all of them were made through the agency of the Dispensary Staff, on receipt of notification by a medical practitioner, or after diagnosis by me. The occupations of the applicants were as follows:—

Colliers	31
Cotton Operatives	22
Clerks, Teachers, Shop Assistants	11
Engineers	8
Tailoresses	3
Domestic Servants.....	7
Storekeepers	1
Carter and Chauffeur	2
Labourers	5
Painters	1
Stokers.....	3
Shoemakers	1
Carpenters	2
Rag Sorters.....	1
Pit Brow	1
	99

Ten gave a history of having been in the army, and seven were received direct from army hospitals. Two of the applicants died shortly after receipt of application; and the remaining 97 at time of first examination by me:—

25 were in Stage I.
 23 „ in Stage II.
 38 „ in Stage III.
 2 „ non-pulmonary.
 5 „ doubtful cases.
 4 „ not suffering from Tuberculosis.

Recommendations were made to the Committee as under:—

TUBERCULOSIS OFFICER'S RECOMMENDATIONS.

	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
Number of Applicants	56	43	99
Bowdon Sanatorium	3	7	10
Pemberton Hospital	36	25	61
Special Nourishment	1	4	5
Dispensary Supervision	3	1	4
Domiciliary Treatment only	9	4	13
Died before Examination	1	1	2
Not Phthisis	3	1	4

Special nourishment was also granted to 92 old cases.

Particulars of admission and discharge of patients to and from residential institutions are given below:—

Institution.	Admitted.	Discharged.	Left without Permission.
Bowdon Sanatorium.....	15	16	—
Pemberton Hospital	80	65	4

Transfer to Bowdon Sanatorium, 1.
 Transfer to Whelley Hospital, 3.

The condition of patients on discharge is shown as under:—

Institution.	Improved.	Not Improved.	Total.
Bowdon Sanatorium.....	15	1	16
Pemberton Hospital	65	9	74

Three patients died in Pemberton Hospital, and three patients died in Whelley Hospital after transference from Pemberton Hospital.

Patients receive domiciliary treatment from their panel doctors, both before and after treatment in an institution. They receive in addition, dispensary treatment and supervision of their hygienic routine and home surroundings. Those who are fit to attend the Dispensary are encouraged to do so regularly; and each case is re-considered with a view to modification of treatment every two months. At the end of the year 154 insured persons were under supervision—102 males and 52 females. All but 19 were cases of lung disease.

The total number of borough cases of Tuberculosis under supervision by me on the 31st December was 404, but including county cases, the total number was 2,219. A staff of five nurses (one borough and four county) spend their time, under my direction, in instructing the patients and their friends, and in improving the home conditions.

Sanatorium benefit commenced in July, 1912, and 476 applications were received to the end of 1917.

Of the 476 applications, 407 were actually suffering from Pulmonary Tuberculosis, and of these it was possible to trace 135 who were alive at the end of the year; the condition of 95 being uncertain owing to removals and enlistments, etc. Of the 135 traced:—

67	were on or fit for full work at the end of 1917.
30	„ „ light work „
and 177	„ dead „

i.e., the working capacity was fully or partly restored in at least 97 cases, or practically 71·8 per cent. of those traced. On the other hand, 177 were definitely known to be dead, and it is significant that of these no less than 155 were in Stage III. (*i.e.*, cases with extensive lung disease) at the time of first examination by myself. Most of these advanced cases gave a history of having been treated and certified for periods of varying length, as suffering from “Anæmia,” “Bronchitis,” “Influenza,” and “Debility.” Seeing that these four diseases, or symptoms, frequently accompany the earliest stages of Pulmonary Tuberculosis, I suggest that no certificate for any of them as a cause of disability should be given by panel doctors for a longer period than six weeks, without the patient being referred to the Dispensary as a matter of routine. On the other hand, many of the doctors regularly refer their cases to me, and last year 682 cases were in this way referred to me by doctors in my area.

In confirmation of the above statement, the following analysis of the deaths from Pulmonary Tuberculosis in the borough during 1917 is instructive, as showing the length of time between notification (and presumably diagnosis) and death of patient:—

Deaths.	Insured.	Non-Insured.	Total.
Within 1 month	13	14	27
From 1 to 3 months.....	4	5	9
„ 3 to 6 months.....	3	2	5
„ 6 to 12 months.....	11	9	20
„ 1 to 2 years	16	7	23
„ 2 to 3 years	1	3	4
Over 3 years	4	2	6
*Notification not received till death.....	...	...	13

*Including 3 cases notified as suffering from other diseases.

Thus, out of 107 deaths from Pulmonary Tuberculosis during 1917, in 49, or 45·7 per cent., notification was not received till death, or within three months of death. This percentage is much too high to be accounted for by acute or galloping cases, and furnishes absolute proof of the urgent need of still further co-operation between the panel doctors and the Tuberculosis Dispensary. It is noteworthy that similar figures are available for a great many other towns and districts, and this fact provides ample justification for the national policy of providing specialist services for Tuberculosis, with a view to earlier diagnosis and treatment.

The importance of early diagnosis cannot be over-estimated, as no form of treatment is of much avail for advanced cases. Patients need encouragement to consult their panel doctors as soon as they feel unwell, and the doctors for their part have at their disposal the resources of the Dispensary for the early diagnosis of doubtful cases. The danger of waiting until Tubercle Bacilli are found in the sputum is that by this time the disease is usually advanced. The diagnosis should be made before the lung tissue begins to break down, *i.e.*, before the bacilli can be found.

UN-INSURED PERSONS.

Much of what has been said above, as regards insured persons, applies equally to the un-insured. These cases receive precisely similar care and attention from the Dispensary Staff, and no distinction is made, apart from that necessarily involved in the keeping of two sets of records. They receive, as in the case of insured persons, home treatment from their own doctors, together with dispensary treatment and supervision, as well as periods of treatment in the institutions available, whenever this is required.

Particulars of admission and discharge of patients, to and from residential institutions, are given below :—

Institution.	Admitted.	Discharged.	Left without Permission.
Bowdon Sanatorium.....	3	3	...
Pemberton Hospital	34	25	3
Whelley Hospital	5	3	...

Transfer from Pemberton to Whelley Hospital :—

Admitted, 2 ; discharged, 1.

The condition of patients on discharge is shown as under :—

Institution.	Improved.	Not Improved.	Total.
Bowdon Sanatorium.....	2	1	3
Pemberton Hospital	24	1	25
Whelley Hospital	3	...	3

Two patients died in Pemberton Hospital and three patients in Whelley Hospital.

TREATMENT & ISOLATION OF ADVANCED PATIENTS.

Special attention must be drawn to the valuable work being done at the Pemberton Consumption Hospital, in connection with the nursing, education and isolation of patients in an infectious condition, *i.e.*, with many Tubercle Bacilli in their sputum. Infection is most likely to occur when the number of Tubercle Bacilli is considerable, as is usually found in chronic and advanced cases. The nursing and isolation of infectious cases is thus most desirable, not only on grounds of humanity, but also because in this way a potent source of danger to the other inmates of their houses is removed.

PROVISION FOR PRE-TUBERCULOUS & NON-INFECTIOUS CASES OF TUBERCULOSIS IN CHILDREN.

It is now generally recognised that in Wigan as elsewhere, residential accommodation for a limited number of such children is urgently required. A Residential Open-air School of Recovery, on the lines advocated by the Board of Education, would go far towards meeting the need. The chief difficulty has hitherto been a financial one, but it will be seen from the following that substantial grants could be obtained from public monies, as follows :—

- (1) In order to qualify for grants from the Board of Education the Residential Schools of Recovery must be "recognised" by the Board under the provisions of the Elementary Education (Defective and Epileptic Children Act, 1899). The management of the school then are eligible to receive per unit of £15 10s. 0d. average attendance plus £9 for medical treatment and care, *i.e.*, a maximum of per unit of £24 10s. 0d. ; or
- (2) If the residential school is approved by the Local Government Board under Section 16 (1) (a) of the National Insurance Act, 1911, the Local Government Board would pay to the County or County Borough Council, in whose area a child lived, one-half of the cost of sending suitable children to the institution.

The prospective income of such an institution can be summarised as follows :—

- (1) Grants from Board of Education, £24 10s. 0d. per head.
- (2) Fees from Local Education Authority for children sent by them (payable out of rates) ; or
- (3) Fees from County Borough or County Council for children sent by them (one-half from rates).
- (4) Subscriptions and donations.

Day open-air schools and classes would, of course, go far towards reducing the number of beds likely to be required for the above.

CARE COMMITTEE.

The Care Committee has continued to do useful work, as will be seen from the following summary :—

SUMMARY OF ASSISTANCE GIVEN BY THE CARE COMMITTEE.		
Nourishments only	68	
" bed and bedding	3	
" bedstocks	2	
" bed, bedding, and articles of clothing...	1	
" and articles of clothing	1	
Loan of bed and bedding	4	
" bedstocks only.....	6	
" bedclothes only	5	
" bedpans	4	
Articles of clothing only	4	
Total		98

PERSONS RECEIVING ASSISTANCE.

Insured.	Non-Insured.	Non-Insured (under 16 years).
52	18	28

The Committee have met monthly, and have granted assistance to 98 persons during the year, on the recommendation of the Tuberculosis Officer and Dispensary Nurse, who attend the meetings.

The following Tables summarise the work of the Dispensary in various directions :—

TABLE 1.—NEW CASES EXAMINED.

	Tuberculous.		Non-tuberculous.		Total.	
	1916	1917	1916	1917	1916	1917
Insured.....	71	92	35	59	106	151
Non-Insured	43	21	36	44	79	65
Totals	114	113	71	103	185	216

TABLE 2.—SPUTUM EXAMINATIONS.

	1916	1917
Positive Results	39	60
Negative Results.....	132	153
Totals	171	213

TABLE 3.—CASES UNDER DISPENSARY SUPERVISION on 31st Dec., 1917.

	Insured.		Non-Insured over 12.		Children under 12.	Total.
	M.	F.	M.	F.		
Pulmonary.....	93	42	16	55	39	245
Non-Pulmonary	9	10	13	32	95	159
Total.....	102	52	29	87	134	404

TABLE 4.

(1) INSURED CASES UNDER TREATMENT OR SUPERVISION, 1917 :—	Total Cases.	Died.	D.S. ceased (e.g. not T.B. left district).	Under D.S. on 31 Dec., 1917.
Men	152	37	13	102
Women	86	16	18	52
Totals.....	238	53	31	154

	Insured.	Non-Insured.	Total.
(2) TOTAL NUMBER OF PERSONS SUFFERING FROM TUBERCULOSIS UNDER TREATMENT OR SUPERVISION DURING 1917	238	310	548
(3) NUMBER OF PERSONS UNDER TREATMENT OR SUPERVISION on 31st December, 1917	154	250	404

	Pulmonary.	Non-Pulmonary.	Total.
(4) WORK OF DISPENSARY NURSE :—			
Number of New Tuberculous Cases Visited in 1917.....	177	125	302
Total Number of Tuberculous Persons Visited in 1917...	383	165	548

Number of Visits Paid by Dispensary Nurse..... 2,729

	All Pulmonary on Register, Cases Dec., 1917.	New Cases, 1917.
(5) RESULT OF NURSE'S EFFORTS AS REGARDS PULMONARY CASES :—		
(a) Separate bedroom, i.e., complete isolation	178	132
(b) Separate bed, but not separate room (partial isolation)	62	30
(c) Not satisfactorily isolated	5	1
(6) NUMBER OF SANITARY DEFECTS :—		
Noticed and Reported		5
Remedied		3
(7) NUMBER OF DISINFECTIONS CARRIED OUT BY SANITARY DEPARTMENT		181

Special attention has been given to improving the home conditions, and especially the sleeping arrangements, as the above figures show.

Of the 302 cases notified, 27 were found not to be suffering from Tuberculosis. Seventeen others were not visited by the Dispensary Nurse for various reasons, *e.g.*, in workhouse, asylum, army, etc.

TABLE 5.—GENERAL STATISTICS.

	Insured.	Non-Insured.	Total.
I.—DISPENSARY ATTENDANCES :—			
(1) New cases	151	65	216
(2) Cases examined on discharge from institution	80	8	88
(3) Old cases	524	55	579
(4) Contacts	...	14	14
(5) Total attendances	755	142	897
II.—TUBERCULOSIS OFFICER'S VISITS	30	8	38
III.—TUBERCULOSIS OFFICER'S ATTENDANCES AT MEETINGS	...	...	38

In conclusion, I wish to thank the Town Clerk (Mr. W. H. Tyrer) for helpful advice on various occasions, and my brother Officials for their co-operation. Excellent work has been done by Miss E. Walters (Dispensary Nurse), who has carried out her duties with care and thoroughness. The assistance I have received from Miss A. Fairhurst and Miss E. Platt (temporary clerks) is likewise deserving of mention.

My thanks are due to the Committee for their encouragement and support.

I am,

Your obedient Servant,

GEORGE JESSEL,

M.A., M.D. (Oxon), D.P.H. (Vict.)

*A Senior Tuberculosis Officer,
Lancashire County Council, and
Tuberculosis Officer,
County Borough of Wigan.*

TUBERCULOSIS DISPENSARY,
18th March, 1918.

General Sanitary Work.

INTRODUCTORY.

MILITARY SERVICES.

FACTORY AND WORKSHOP ACT, 1901.

SHOP HOURS ACT, 1892 TO 1905.

SHOPS ACT, 1912.

SHOP HOURS ACT, 1904, CLOSING ORDER.

MEAT INSPECTION AND SLAUGHTER-HOUSES.

DAIRIES, COWSHEDS AND MILKSHOPS ORDER, 1885 AND 1886.

BLACK SMOKE NUISANCE.

HOUSING AND TOWN PLANNING ACT, 1909.

REMOVAL OF NIGHTSOIL, &c.

OFFENSIVE TRADES.

EDUCATION ACT, 1902, 1904.

PUBLIC ANALYST REPORT.

RAINFALL.

INTRODUCTORY.

The general sanitary circumstances of the Borough are similar to those fully described in previous reports, and the usual description is omitted this year.

The water supply has been obtained from the usual sources, and has been of satisfactory quality.

Milk Supply.—Full particulars will be found in the Borough Analyst's report as to the quality of the samples taken.

MILITARY SERVICES.

Few soldiers have been billeted in the town during the year, as recruits were speedily sent away for training. The constant return of soldiers to infected houses has entailed an amount of supervision as well as the disinfection of their clothing previous to leaving the Borough. The firms in the town supplying foodstuffs for the Army have been inspected from time to time at the request of the Authorities, with a view to maintaining a reasonable standard of sanitation and cleanliness.

FACTORY AND WORKSHOP ACT, 1901.

The workshops have been regularly and systematically visited by your Inspectors ; and also the factories, on receipt of report from H.M. Inspectors. The bakehouses have been regularly visited and any nuisances arising have been promptly dealt with. The regulations as to limewashing, cleanliness, etc., have been enforced. The underground bakehouses have been kept in a sanitary condition.

1.—INSPECTION.

Premises.	No. of Inspections.	No. of written Notices.
Factories (including Factory Laundries)	66	6
Workshops (including Workshop Laundries)	565	1
Workplaces	...	...
TOTAL	631	7

2.—DEFECTS FOUND.

Particulars.	No. of defects found.	No. of defects remedied.
<i>Nuisances under Public Health Acts :—</i>		
Want of Cleanliness	26	20
Want of Ventilation	1	1
Overcrowding	...	...
Want of Drainage of Floors.....	...	...
Other Nuisances	6	4
Sanitary insufficient	3	3
Accommo- unsuitable or defective	12	12
dation not separate for sexes	...	...
<i>Offences under the Factory and Workshop Act :—</i>		
Illegal occupation of underground bakehouse	...	...
Breach of special sanitary requirements for bakehouses	42	40
Other offences	1	1
TOTAL	91	81

Notices from H.M.I., 2. Escapes in case of fire ; not a nuisance.

3.—HOME WORK.

OUTWORKERS' LISTS, SECTION 107.							
Nature of Work.	Lists received from Employers.						Notices served on occupiers as to keeping or sending lists (8)
	Sending twice in the year.			Sending once in the year.			
	Lists. (2)	Outworkers.		Lists. (5)	Outworkers.		
		Con-tractors (3)	Work-men (4)		Con-tractors (6)	Work-men (7)	
WEARING APPAREL :							
(1) Making, etc....	24	16	147	2	...	7	17
(2) Cleaning, etc...	...	...	...	...	...	...	...

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Workshops	319
Bakehouses	111
Domestic Workshops (not Outworkers)	14
Total Number of Workshops on Register	444

5.—OTHER MATTERS.

Class.	Number.
<i>Matters Notified to H.M. Inspector of Factories :—</i>	
Failure to affix Abstract to the Factory and Workshop Act (s. 133) ...	6
Notified by H.M. Inspector	9
Report (of action) sent to H.M. Inspector	14
Other.....	...
<i>Underground Bakehouses (s. 101) :—</i>	
Certificates granted during the year	...
In use at the end of the year	5

TRADES FOR WHICH REGISTERED WORKSHOPS ARE USED.

Dressmaking	37	Coopers	2
Boot Repairing	39	Joiners	5
Clogging.....	29	Cycle Repairers	5
Tailoring	37	Tripe Dressers	2
Millinery	41	Marine Store Dealers	5
Clothing	21	Coffin Maker	1
Saddlers	5	Soap Boilers.....	1
Jewellers	5	Ginger Beer Works.....	2
Plumbers	13	Clay Pipe Maker	1
Painters	9	Hard Confectionery	1
Shoeing Smiths	6	Mantle Making	4
General Smiths.....	3	Bottlers.....	4
Wheelwrights	5	Rope Walker	1
Cabinet Makers	4	Coach Builders	2
Ice Cream Makers	2	Tin-plate Workers	5
Scale Repairers	2	Tarpaulin Sheet	
Laundries	2	Manufacturers	1
Knitting	2	Carver	1
Picture Framers	3	Watch Repairers	3
Wreathes	2	Piano Repairer	1
Electrical Works	1	Upholsterer	1
Waste Paper Dealer	2	Monumental Mason	1
Total			319

NUMBER OF WORKSHOPS ON REGISTER.

1917	1916	Decrease,
319	357	38

NUMBER OF DOMESTIC WORKSHOPS ON REGISTER.

1917	1916	1915
14	9	21

FACTORY AND WORKSHOP ACT, 1901.

Notices received from H.M. Inspector.....	9
Section 5—Sanitary defects	17
Complied with	10
<i>(Two re-escapes, not considered a nuisance.)</i>	

NUMBER OF BAKEHOUSES ON REGISTER.

1917	1916	Decrease.
111	115	4

Nine are certified underground bakehouses, and are as follows :

22, Earl Street.	36, Wigan Lane (<i>not in use</i>).
32, Market Street.	108, Wallgate (<i>not in use</i>).
58, Market Street.	12, Wallgate (<i>not in use</i>).
10, Standishgate.	Woodcock Street (<i>not being</i>
34, Wigan Lane.	<i>used as bakehouse</i>).

OUTWORKERS' LISTS (SECTION 107).

No. of Visits to Outworkers' Premises	—
„ Nuisances arising	—

SHOP HOURS ACT, 1892-1905.

SHOP ACTS, 1912 AND 1913.

The work done under this Act is given fully in the Chief Sanitary Inspector's report. The infringements were complied with upon warning from the Inspectors.

INFRINGEMENTS.

Notices not exhibited	22
Want of Form	3
	25
No. of Observations (day)	358
„ „ (night)	492

SHOP HOURS ACT, 1904 (CLOSING ORDER).
(HAIRDRESSERS AND BARBERS.)

The work done under this Order is given in your Inspector's report.

No. of Infringements	3
„ Visits (day)	599
„ „ (night)	86

SLAUGHTER-HOUSES AND MEAT INSPECTION.

There are 25 registered slaughter-houses in the Borough, all of which are registered under the 'Towns' Improvement Clauses Act, and 1 licensed slaughter-house. Most of these slaughter-houses are unsatisfactory, and in default under the Bye-laws. They are generally in close proximity to dwellings, but unfortunately cannot be closed on this account. Many of them are ill-paved, improperly drained, and insufficiently lighted. The middens in connection with the slaughter-house constitute a serious nuisance, and as breeding-places for flies constitute a real danger to health.

The Health Committee has enforced more strictly the provisions of the Public Health Acts, and the Local Bye-laws, that deal with the removal of manure, as it is obvious that these breeding-places for flies cannot be allowed to remain unchecked.

The fact that the work of slaughtering is distributed among 26 slaughter-houses in different parts of the Borough renders the work of meat inspection difficult. It is to be hoped that in the near future the provision of the Municipal Abattoir already decided upon by the Council may be accomplished. At present, however, no definite steps have been taken for various reasons, but a Sub-Committee has been appointed to endeavour to find a suitable site.

Cases of Tubercular or other disease in meat are reported to the Health Department by the butchers, and are then examined by Inspectors, who refer doubtful cases to your Medical Officer.

Independently, the slaughter-houses are regularly visited by the Inspectors.

The Council have decided to appoint a whole-time Veterinary Surgeon to be responsible for the meat inspection of the Borough as well as the other veterinary work of the Corporation. It is intended for patriotic reasons to defer making this appointment until the conclusion of the War.

Particulars of meat and other foodstuffs surrendered and destroyed will be found in your Chief Sanitary Inspector's report.

DAIRIES, COWSHEDS AND MILKSHOPS ORDER.

The following is the report of Mr. Woods, your Veterinary Inspector :—

GENTLEMEN,

Although two new cowkeepers have been registered during the year, the total number of cattle kept within the Borough is somewhat less. I have not found a single case of Tuberculosis of the Udder during the period in question. A few cases of Mastitis have occurred, but not one on investigation proved tubercular.

It may be that owing to abnormal conditions I have not always been able to inspect at the best time for detecting slight tubercular deposits, *i.e.*, when the udder is empty ; but I find that in Birmingham very few cases were discovered, though that city has a large milch cow population, and a most efficient system of inspection. I believe the true explanation to be that owing to the high price of meat for cattle not in prime condition, owners have immediately sent for slaughter any cow that appeared to be losing condition, which is what tubercular animals nearly always do. Another thing is that the Farmers' Association throughout the country have educated cowkeepers to a knowledge of the danger of infection from a tubercular animal, the result being that there is a considerably less number of cattle with any form of Tuberculosis. This, along with the registration of bulls, is distinctly improving the quality and soundness of our herds.

The whitewashing and general cleanliness of the cowsheds has been wonderfully well attended to considering the difficulties in regard to labour. One of our largest cowkeepers started milking his cows by machinery, but like many others, he found the disadvantages greater than the benefits, and has abandoned it.

(Signed) WM. WOODS,
Veterinary Inspector.

SMOKE NUISANCE.

Owing to pressure of other work few observations were taken. Warnings were given whenever necessary, and these usually had the desired effect. The enlistment of stokers and the substitution of less efficient labour have been taken into account.

HOUSING AND TOWN PLANNING.

The Housing and Insanitary Houses Committee has met monthly, with additional meetings from time to time, in order to try and clear off the large amount of accumulated arrears. Seventeen houses were made habitable, as compared with 52 in the previous year.

The following table shows the number of houses under consideration at the beginning of the year, the number reported to the Committee during the year, and the result of the decisions of the Committee, and the work carried out under their instructions :—

No. of houses in respect of which Closing Orders were still operative on January 1st, 1917	64
No. of Demolition Orders made, and not complied with, on January 1st, 1917	35
No. of houses inspected during 1917	7
No. of houses reported as unfit for human habitation in 1917...	7
No. of Closing Orders made during 1917	—
No. of Closing Orders not made during 1917	7
No. of Closing Orders determined during 1917	6

No. of Demolition Orders made during 1917	—
No. of houses demolished in compliance with Demolition Orders	5
No. of houses converted to store after Demolition Order during 1917	1
No. of houses made habitable after Demolition Orders during 1917	1
No. of houses in respect of which Demolition Orders remained operative on December 31st, 1917	28
No. of houses in respect of which no Orders have been made remaining on books December 31st, 1917.....	24
No. of houses in respect of which Closing Orders remained operative on December 31st, 1917	58
The number of houses made habitable during the year is.....	17
The number of back-to-back houses converted into through houses is	8

The following table shows the number of houses reported to the Committee, the number of Closing Orders made, and the number of houses demolished in each year since the passing of the Housing and Town Planning Act, 1909 :—

	1909	1910	1911	1912	1913	1914	1915	1916	1917
Houses reported...	8	32	42	281	97	162	29	...	7
Closing Orders	5	14	13	245	83	83	39	11	...
Houses demol'hed	5	13	...	14	23	2	13	12	5

The number of fresh properties reported to the Committee was restricted for the following reasons :—

1. The request of the Local Government Board that only the most urgent cases should be dealt with, owing to the need for private economy and the shortage of labour and materials.
2. The serious shortage of houses, which rendered closing or demolition undesirable as far as possible.
3. The serious calls upon the time and energies of the whole staff, owing to the large amount of infectious disease.

Owing to the War, and the consequent restrictions on borrowing, actual building operations are postponed. The Committee have also had other schemes for additional houses under consideration.

UNPAVED YARDS AND PASSAGES, &c.

The following have been dealt with for defective surfaces of yards and passages :—

- 9, Field Street.
- 4, Orrell Street.
- 119, Wallgate.
- 4, Cowling's Place, Leader Street, Pemberton.
- 3, Egerton Street.
- 5, Argyle Street, Pemberton.

REMOVAL OF NIGHTSOIL, &c.

The Borough Surveyor has kindly supplied me with the following particulars :—

	T.	C.	Q.
House refuse collected in Borough from January 1st to December 31st, 1917	20,084	0	2
Pails excreta removed in 1917	5,927	9	2
Midden and Ashpit Refuse removed in 1917	8,928	10	1
Number of Pail Closets in Borough	7,245		
Number of Pails collected in 1917	399,194		
Cost (including washing and distribution)	£2,876	11	11
Cost of Collecting Ashes during 1917	£3,557	14	5
Cost of Collecting Midden and Ashpit Refuse during 1917... ..	£1,375	13	8
Number of privy middens in Borough	1,587		
„ „ emptied, 1917.....	8,953		
Number of new houses erected in 1917	6		
„ water closets in Borough to February 28th, 1918	7,497		

MIDDENS, ASHPITS AND CESSPOOLS.

Year.	ABOLISHED.			RE-CONSTRUCTED.		
	Middens.	Ashpits.	Cesspools.	Middens.	Ashpits.	Cesspools.
1904	1	...	...	3	...	...
1905	7	...	...	5	...	...
1906	6	...	...	2	...	...
1907	4	...	...	3	...	...
1908	6	...	1	3	...	...
1909	5	1	...	15	3	...
1910	1	...	...	2	...	...
1911	11	...	...	32	3	...
1912	7	...	...	16	3	...
1913	9	1	...	7	1	...
1914	14	3	...	...	5	...
1915	12	3	...	12	3	...
1916	6	...	...	2	...	...
1917	2	...	...	...	...	...
TOTAL ...	91	8	1	102	18	...

Middens	193	demolished or re-constructed.
Ashpits	26	„
Cesspools	1	„

CONVERSION OF CLOSETS.

Middens or pail closets converted into water closets in each of the following years :—

1904	8	1911.....	86
1905	28	1912.....	44
1906	23	1913.....	47
1907	26	1914.....	62
1908	21	1915.....	99
1909	60	1916.....	42
1910	5	1917.....	9
TOTAL			560

OFFENSIVE TRADES.

These have been kept under close supervision, and certain improvements and alterations that were urgently necessary, have now been carried out. There have, in consequence, been few complaints of nuisance since.

RAINFALL, 1917.
AT WORTHINGTON.

Month.	Rainfall in inches and Tenths.	No. of days on which rain fell, being .01 of an inch or more.
January	2.61	13
February	1.39	10
March	2.18	16
April	2.11	17
May	2.42	12
June	2.10	17
July	2.12	9
August	6.79	26
September	2.34	15
October	7.58	25
November	4.37	22
December.....	2.57	16
TOTAL	38.58	198

The mean average rainfall for the past 60 years, 37.35 inches.

RAINFALL, 1917.
AT BISPHAM.

Month.	Rainfall in inches and Tenths.	No. of days on which rain fell, being .01 of an inch or more.
January	2.11	10
February	1.53	7
March	2.15	15
April	1.54	11
May	2.88	12
June	1.88	17
July	1.92	9
August	8.26	26
September	2.17	12
October	8.01	25
November	4.01	23
December.....	1.72	14
TOTAL	38.18	181

Average consumption per head per day, Wigan and Pemberton, (estimated population, 84,419) was 2,063 gallons.

Annual Report of the Public Analyst, 1917.

COUNTY ANALYST'S LABORATORY,

MANCHESTER, July 29th, 1918.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I have the honour to report the following summary of analytical work carried out during the year 1917, viz. :—

SALE OF FOOD AND DRUGS ACT, 1875.

One hundred and fifty-four samples were submitted as follows : 78 milks, 23 butters, 8 sugars, 6 flours, 6 margarines, 5 coffees, 4 each of ice cream, tea, and preserved cream ; 3 self-raising flours, 2 each of rice, pepper, and ground ginger ; and 1 each of cream powder, cream of tartar substitute, lard, cream, cocoa, tapioca, and corn syrup.

The samples reported against as adulterated or of unsatisfactory quality were 6 milks (which contained added water varying from 3·5 per cent. to as high as 38 per cent.) and 2 ice creams. The latter revealed a degree of bacterial contamination suggestive of carelessness in handling or storage.

All samples of milk showed a satisfactory freedom from preservatives. The fatty foods, which include butter, margarine, lard, and cream (preserved and pure), were of good average quality.

The two latter, which are more exactly classified under the Milk and Cream Regulations, were in accordance with the provisions of the Order. The flours and self-raising flours were unbleached samples, and the latter were free from arsenic, traces of which are liable to occur where acid-phosphate powders are substituted for cream of tartar in the self-raising constituents. In this connection, the cream powder and cream of tartar substitute contained acid-phosphate sufficiently de-arsenicated to insure an arsenical content of less than one-hundredth of a grain per pound.

The polarimetric readings of the sugar samples indicated 95 per cent. and upwards of sucrose.

Chemically and microscopically, the starchy foods and condiments (including rice, pepper, ground ginger, etc.) were of sound commercial quality, and the coffees and cocoa were free from foreign vegetable tissue, starch, etc.

CAKE AND PASTRY ORDER, 1917.

This Order regulates the amount of sugar to be introduced into confectionery, and prescribes the following maximum percentages of cane sugar:—scones, nil; buns, 10 per cent.; biscuits and cakes, 15 per cent. Twelve miscellaneous samples were examined, and the sugar was found to vary considerably, but in each case fell below the limit provided.

FERTILISERS AND FEEDING STUFFS ACT, 1906.

Eight samples of feeding stuffs, viz.:—4 oats, 3 brans, and 1 bean were submitted; three being reported as of unsatisfactory quality on account of a low albuminoids figure. This class of material has of course deteriorated because of war conditions, and in absence of any invoice it is somewhat difficult to say what is and what is not satisfactory.

WATER SUPPLY.

Nine of the 12 monthly analyses were in respect of the Wigan supply, taken from different wards in the Borough. The more important average results were as follows:—

	HARDNESS.						PART PER MILLION.		
	Before boiling.			After boiling.			Alb'd. Ammonia.		
	Max.	Min.	Aver.	Max.	Min.	Aver.	Max.	Min.	Aver.
Wigan Corporation Supply	11·	7·7	8·6	7·3	5·5	6·1	·13	·08	·11
Pemberton Supply	13·5	12·25	12·9	4·0	0·5	2·3	·14	·09	·11

Despite variations in free ammonia and albuminoid ammonia the supply has maintained its satisfactory reputation, and the slight degree of organic contamination shown, *inter alia*, in the above figures is of vegetable origin, and not derived from sewage or similar pollution. Whilst of average hardness, compared with most communities, industrially it is a sound supply and perfectly amenable to treatment for steam-raising and other purposes.

In conclusion, I beg to record my indebtedness to the Chief Inspector (Mr. C. H. France) for his ever-willing co-operation; and also, my sincere appreciation of the support which one has always had from Committee and fellow officials.

I am, Gentlemen,

Your obedient Servant,

S. ERNEST MELLING,

County & Public Analyst.

Annual Report of the Chief Sanitary Inspector 1917.

TABLE OF CONTENTS.	Page.
American Gooseberry Mildew (Fruit) Order	70
Canal Boats	65
Common Lodging Houses and Houses Let in Lodgings...	63
Conversions	63
Dairies, Cowsheds and Milkshops Order.....	70
Diseases of Animals Act.....	70
Factory and Workshop Act.....	69
Fertilizers and Feeding Stuffs Act	69
Food and Drugs Act	66
Food Condemned	64
Housing and Town Planning Act	71
Infectious Diseases	65
Introduction	61
Offensive Trade Premises	64
Prosecutions	71
Rag Flock Act	70
Shop Act	70
Slaughter-houses, etc	64
Smoke Nuisances	65
Summary of Visits and Nuisances dealt with.....	62

HEALTH DEPARTMENT,

WIGAN, July, 1918.

To the Chairman and Members of the Health Committee.

SIR AND GENTLEMEN,

I have very great pleasure in submitting for your perusal my SIXTH ANNUAL REPORT of the work carried out by the Staff, under my supervision, during the year 1917.

The work has still been very heavy, and to maintain the degree of efficiency and to cope with the extra work, the time of the Staff has not been limited to office hours.

Infectious diseases have been very prevalent during the year, and this has necessitated a great pressure being placed upon the Disinfection Staff.

Certain food factories—where War Office contracts have been accepted—have been regularly supervised; also the food places in the Borough.

I have again to tender to you my sincere thanks for the courteous help and consideration extended to me and my staff,

To the Inspectors and Staff I express my thanks and appreciation of their loyal services under heavy responsibilities.

To the Chief Officials of the Corporation, whose services I have sought in the carrying out of my duties, I express my thanks.

The work done is given in table under their different headings.

I am, Gentlemen,

Your obedient Servant,

CHARLES H. FRANCE,

C.R.S.I., M.S.I.A., A.R.S.I., &c.,

Chief Sanitary Inspector, &c.,

Member of the N.W. Centre

Council and General Council,

S.I. Association.

NUISANCES.

Houses and premises inspected and visited <i>re</i> nuisances and complaints.....	1018
Nuisances discovered	793
Nuisances abated	535
Notices issued (preliminary)	394
„ „ (formal).....	299
Re-visits to nuisances	1630
Other visits made	1951
Visits to premises (testing of drainage)	85
Letters issued <i>re</i> nuisances	152
„ „ upon other matters	210
Nuisances remaining on books, December 31st, 1917.....	140

DESCRIPTION OF NUISANCES DEALT WITH.

Defective drainage.....	17
Choked drainage	186
Defective and foul gullies	4
Gullies requiring grids	1
Want of slopstones and pipes	3
Slopstones defective	21
Soil pipes or connections defective.....	8
Defective or choked water closets	43
Defective water supply to closet	2
Defective sink waste pipes (connected to drains)	3
Defective condition of closets (roof, walls, door, seat or floor)...	54
Want of doors to closets	10
„ „ ash-house	4
Defective condition of ash-houses (roof, walls, door or floor)...	4
Defective or choked waste water closets.....	14

Want of ash tubs	2
Workshops require limewashing	1
Defective water closet cisterns	29
Insufficient closet accommodation to houses or workshops.....	5
Insufficient ventilation to closets to factories and workshops...	2
Insufficient means of escape in case of fire to workshops and factories	2
Defective spouts (eave or down)	87
Want of spouting to premises	4
Defective roofs	94
Defective flagging or paving (yards and passages).....	8
Houses overcrowded or keeping of lodgers	3
Defective or foul urinals	1
Houses with filthy closets	3
„ „ filthy yards and entries	3
„ „ damp and defective walls	33
Bath and Lavatory waste pipes connected to drains	1
Bath and lavatory waste pipes defective	1
Defective middensteads	1
Accumulations of manure	6
„ „ water	1
„ „ rubbish	7
Keeping of animals	7
Miscellaneous	86

Conversions have been carried out in the following properties, from privies and pails to water closets:—

53 and 55, Queen Street	2 pails to	2 water closets
18 and 19, Acton's Yard, Marsh Lane	2 „	2 „
10, Pitt Street	1 „	1 „
30, 32, 34, 36 and 38, Fleet Street, Pemberton.....	2 privies to	4 „
11 and 12, Gibraltar, Pemberton	1 „	2 „
2, 4, 6 and 8, School Street, and 47, School Lane ...	4 pails to	4 „
1 and 2, Lea's Yard, Pitt Street, and 6 and 8, Pitt Street	2 „	2 „
13, 15, 17, 19 and 21, Bridge Street, and 1, Lither- land's Yard, Bridge Street.....	4 „	4 „
1, 2 and 3, Peer's Yard, Pitt Street, and 3, 5, 7, 9 and 11, Pitt Street	4 „	4 „

COMMON LODGING-HOUSES.

No. of common lodging-houses in the Borough.....	17
„ „ lodgers allowed nightly	764
„ „ visits by day	913
„ „ „ night	17
„ „ lodgers reported as being received (per returns)	129,572
„ „ letters sent out	3
„ „ houses on register end of 1916	18
„ „ houses given up during the year	1
„ „ houses remaining on register end of 1917	17

HOUSES LET-IN-LODGINGS.

No. of houses on register	15
,, visits by day	108
,, letters sent out	—

SLAUGHTER-HOUSES, OFFENSIVE TRADES, AND MARKETS.

No. of slaughter-houses in the Borough	26
,, offensive trade premises in the Borough	7
,, knackers' yards in the Borough (licensed)	2
,, visits to slaughter-houses	1793
,, ,, offensive trade premises	146
,, ,, markets.....	371
,, ,, butchers and other food shops	452
,, letters sent out	1
,, certificates issued (condemned food)	90

The following animals were examined as to their fitness for sale :—

	Passed.	Condemned.	Part passed and part condemned.
Oxen	456	2	16
Pigs	2	4	...
Sheep	...	1	...
Calf	3	2	...

The condemned oxen, pigs and one calf were tubercular. The sheep was suffering from Peritonitis. One calf was suffering from joint-ill.

FOOD CONDEMNED, 1917.

2 Beasts.	1 Box of mixed fish.
4 Pigs.	1 Box of Whiting.
1 Sheep.	1 Box of Finnon haddock.
2 Calves.	1 Box of frozen haddock.
825 Rabbits.	1 Load of cabbages.
22 Fowls.	2 Baskets of cabbages.
5 Geese.	1 Basket of radishes.
1 Barrel of oysters.	401 Baskets of strawberries.
5 Barrels of herrings.	2 Baskets of Cherries.
6 Barrels of gurnetts.	1 Basket of mixed fish.
11 Boxes of dried fish.	1 Basket of beans.
99 Boxes of kippers.	17 Crates of bananas.
78 Boxes of red herrings.	24 Bags of carrots.
78 Boxes of mackerel.	3 Hampers of apples.
2 Boxes of halibut.	1 Ham.
2 Boxes of codfish.	30lbs. of cheese.
1 Box of flukes.	

The following statement shows the quantities of unwholesome food and shellfish and other refuse destroyed at the Miry Lane Depot during the year :—

	T.	G.	Q.
Fish	4	6	3
Beef	9	0	2
Pork	0	3	1
Fish Refuse.....	3	4	1
Other Refuse	209	1	1
	<u>225</u>	<u>16</u>	<u>0</u>

CANAL BOATS ACTS, 1877 & 1884.

No. of boats that have been registered at Wigan.....	295
„ „ still in use or available	51
„ „ not in use	189
„ „ that cannot be traced	35
„ „ re-registered with other Authorities	20
„ „ at Wigan	6
„ applications for registration and re-registration during the year	—
„ applications granted	—
„ boats re-registered	—
„ inspections made.....	6
„ notices issued.....	—
„ „ complied with	—
„ contravention of regulations	—
„ letters sent out	1
„ certificates renewed	—
„ occupants of boats inspected (men 12, women 4)	—

SMOKE NUISANCES.

No. of observations taken	—
---------------------------------	---

INFECTIOUS DISEASES (PREVENTION) ACT, &c.

During the year all the schools were sprayed, following their closure, owing to the prevalence of an infectious disease in epidemic form.

Certain wards of the Infectious Diseases Hospital were disinfected ; as also were the kits of soldiers who became “ contacts.” Soldiers were quarantined for a certain period, in accordance with Army instructions.

Library books from infected houses were disinfected, and returned by this Department direct to the Library.

No. of houses disinfected.....	1770
„ rooms disinfected.....	2037
„ beds disinfected.....	1592
„ mattresses disinfected	999
„ sheets and quilts disinfected	2972
„ other articles disinfected.....	9211
„ premises cleansed and limewashed after infectious disease	232
„ visits to houses <i>re</i> limewashing and cleansing, etc.	572
„ „ „ infectious disease	5456
„ letters sent out <i>re</i> infectious disease.....	—
„ „ „ limewashing	95
„ library books disinfected.....	46

SALE OF FOOD AND DRUGS ACTS ; MARGARINE ACTS ;
PUBLIC HEALTH (MILK & CREAM) REGULATIONS, 1912.

All the samples, with one exception, were submitted to the Public Analyst.

Milk.—Samples were obtained from shops, railway stations, and milk carts. In cases of adulteration, further samples were obtained from the farmer, the farms visited, and all appliances, etc., carefully inspected. Every sample was examined by the Public Analyst for preservatives.

No. of samples obtained for analysis	154
" " genuine	146
" " adulterated.....	8
" " (informal)	36
" letters sent out	53
" samples obtained (not sent for analysis).....	1

PUBLIC HEALTH (MILK & CREAM) REGULATIONS, 1912.

New Milk. Cream.

1. MILK AND CREAM NOT SOLD AS PRESERVED CREAM.

No. of samples examined for the presence of a preservative	78	3
--	----	---

No. in which a preservative was reported to be present	—	—
--	---	---

2. CREAM SOLD AS PRESERVED CREAM.

(a) Correct statements made (as per label)...	2
---	---

(b) Above 35 per cent. (milk fat).....	2
--	---

(c) No. of instances where regulations contravened	—
--	---

3. THICKENING SUBSTANCES.

No evidence of addition.

Article.	Samples.	Genuine.	Adulterated.	Not Formal.
Milk	78	72	6	6
Butter	23	23	...	5
Margarine	6	6	...	2
Coffee	5	5	...	...
Self-raising Flour	3	3	...	3
Lard	1	1	...	...
Sugar	8	8	...	1
Cream of Tartar Subst. ...	1	1	...	1
Cream Powder	1	1	...	1
Preserved Cream	2	2	...	2
Cream	3	3	...	3
Tea	4	4	...	...
Rice	2	2	...	...
White Pepper	2	2	...	...
Ground Ginger	2	2	...	...
Tapioca	1	1	...	...
Flour	6	6	...	6
Cocoa Essence.....	1	1	...	1
Ice Cream	4	2	2	4
Corn Syrup	1	1	...	1
TOTALS	154	146	8	36

No. of Sample.	Formal or Informal.	Article.	Extent of Adulteration.		Result.
9 } 10 }	Informal ...	Ice Cream...	Avoidable contamination ... }		Examination made for detection of B. Enteritidis and revealed suggested degree of contamination. Premises visited and instructions given to proprietors. Further samples gave negative results.
26	Formal ...	New Milk ...	6.9 extraneous water. Milk Fat 2.83		
43	Informal ...	New Milk ...	38 per cent.	do.	Fined £2. Purchased through agency (private house). Further sample to 26.
46	Formal ...	New Milk ...	31.7	do.	Further sample in connection with 26. Fined £3.
48	Formal ...	New Milk ...	32.9	do.	Do. do. 26. Fined £5.
50	Informal ...	New Milk ...	7.0	do.	Do. do. 26.
51	Informal ...	New Milk ...	35 per cent.	do.	Do. do. 26.

HISTORY—ADULTERATED SAMPLES.

Samples Nos. 9 and 10.—As stated, these were purchased in order to ascertain any impurities which they may contain owing to the insanitary conditions of premises. The result is given previously. Improvements were carried out immediately.

Samples Nos. 26, 43, 46, 48, 50 and 51.—Following sample No. 26, the other samples were secured in following up the case. Informal samples were taken from a private house and from the farm premises. The presence of added water was shown from the time when the milk left the shippon to its being delivered to customers.

Samples Nos. 44, 45, 47 and 49.—These were given as pure. Milk was purchased from other dealers in order to supplement supplies.

No. 26—on delivery.	6.9	extraneous water.
No. 43—private house.	38.0	„ „
No. 44—bucket in dairy. Milk fat	4.2.	No extraneous water.
No. 45—bucket in shippon.	„ 4.2.	No extraneous water.
No. 46—on delivery.	„ 2.5.	Extraneous water 31.7.
No. 47—on delivery.	„ 3.4.	Said to be own milk.
No. 48—on delivery.	„ 2.7.	Extraneous water 32.9.
No. 49—shippon.	„ 3.5.	No extraneous water.
No. 50—shippon.	„ 3.4.	Extraneous water 7%.
No. 51—pail in outhouse.	„ 2.9.	Extraneous water 3.5.

FOOD ORDERS.

During the year I had put under my supervision the following Orders of the Food Control:—

Price of Milk Order (1917).
Food (Condition of Sale) Order.
Cake and Pastry Order.
Sugar (Confectionery) Order.

In reference to the Cake and Pastry Order, the bakeries (wholesale and retail) were visited, and the occupiers interviewed and instructed as to what articles complied with the Order. During the year warnings by letter and verbally were given.

Twelve samples of cakes were procured and submitted to the Analyst for examination as to percentages, etc., in accordance with the provisions of the Order. The results were as shown in the Analyst's report.

Other visits under the Orders are given herewith.

CAKE & PASTRY ORDER.

No. of visits (day)	318
„ „ (night)	15
„ observations (day)	829
„ „ (night)	6
„ complaints and cautions	62
Food (Condition of Sale) Order.....	36
„ „ visits	51
Letters sent out	11

MISCELLANEOUS VISITS.

Visits to fair vans	87
Letters sent out	210

MARGARINE AND MARGARINE CHEESE.

Under the above, 12 persons are registered as Wholesale Dealers for 15 premises.

FERTILIZERS AND FEEDING STUFFS ACT, 1906.

During the year only eight informal samples were obtained. Five were reported as satisfactory and three as unsatisfactory—in these satisfactory explanation was forthcoming. The samples reported against were two of bran and one of whole oats.

Letters were sent out in these cases. No invoices were given.

SAMPLES.

Whole oats	4
Whole beans	1
Bran	3

FACTORY AND WORKSHOP ACT.

No. of workshops on register	319
„ bakehouses on register	111
„ domestic workshops on register	14
„ visits to outworkers' premises	—
„ „ factories	66
„ „ workshops	565
„ defects dealt with	91
„ letters sent out	41
„ underground bakehouses	5

During the year the following workshop was granted a certificate as being provided with sufficient means of escape in case of fire:—

Workshop : 157A, Scholes.

SHOP ACTS, 1912 & 1913.

No. of shops on register	2234
„ visits to shops (day).....	526
„ „ (night)	14
„ „ <i>re</i> Closing Order, barbers and hair-dressers (day)	73
„ „ <i>re</i> Closing Order, barbers and hair-dressers (night)	72
„ observations (day)	358
„ „ (night)	492
„ visits <i>re</i> National Closing Order (day).....	258
„ observations <i>re</i> National Closing Order (day)	19
„ „ „ „ (night) ...	209
„ letters sent out	22

REPORT OF OFFENCES, 1917.

Cautioned for not exhibiting Closing Notice	22
„ „ having form (Assistants' half-holiday)	3
„ „ having half-holiday	7
„ employing young persons after working under Factory and Workshops Act...	4
„ offence (Barbers and Hairdressers' Closing Order)	3
„ meal intervals	3

DAIRIES, COWSHEDS AND MILKSHOPS ORDER.

No. of cowsheds on register, 1915	44
„ dairies on register, 1915	6
„ milkshops on register, 1915	148

DISEASES OF ANIMALS ACTS.

The provision of these Acts so far as relate to this Department have been given the attention required.

AMERICAN GOOSEBERRY MILDEW (FRUIT) ORDER, 1912.

The markets have been regularly visited and the fruit shops supervised during the season of this fruit.

RAG FLOCK ACT, 1912.

The provisions of this Act have been carried out. No samples have been obtained.

HOUSING AND TOWN PLANNING ACT, 1909.

No. of visits to premises <i>re</i> Housing and Town Planning Act	76
„ re-visits to premises <i>re</i> Housing and Town Planning Act	272
Property reported upon, 1917	7
„ on books, January 1st, 1917.....	146
Property with C. and D. Orders on, January, 1917.....	112
„ „ Preliminary Notices on, January, 1917	32
„ „ no Orders on, January, 1917.....	2
„ „ Notice (Section 15) on, January, 1917.....	—
„ „ Closing Orders on, but not let for human habitation by agreement, January, 1917.....	—
	146
Made habitable, 1917	8
Demolished, 1917.....	5
Made into through houses, 1917.....	9
Not used for human habitation, 1917	1
Done away with, but re-construction, 1917	—
Converted to outhouse, 1917.....	—
	23
Property still on books, December 31st, 1917	130
	153

PROSECUTIONS, 1917.

Case 1. May 14th.—*Food and Drugs Act*. Selling to the prejudice of the purchaser milk not of the nature, etc., demanded.

March 25th. Fined £2.

April 14th. „ £3.

„ 21st. „ £5.

May 14th.—*Food and Drugs Act* (Section 9). This case withdrawn on defendant being convicted under Section 6.

